# **DSA Access Compliance Regulations**

#### Introduction

Section 2 – Regulations: The California Code of Regulations (CCR) is the official compilation and publication of the regulations adopted, amended or repealed by state agencies. The CCR consists of 28 titles; Title 24, the California Building Standards Code, serves as the basis for the design and construction of buildings in California. The regulations included in this document are excerpted from Title 24 and include building regulations, adopted by DSA, which govern accessibility for persons with disabilities.

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Title 24 (T-24) — Parts 1 — 12

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Effective January 1, 2008

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**ASME** 

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Effective January 1, 2008

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#### 2007 California Administrative Code Title 24 (T-24), Part 1 (Pt), California Code of Regulations (CCR)

### Chapter 5 ACCESS TO PUBLIC BUILDINGS BY PERSONS WITH DISABILITIES

### Article 1 COMPLIANCE PROCEDURES

**5-101. Purpose.** These regulations implement Sections 4450 et seq. of the Government Code to ensure that where state funds are utilized for the construction or alteration of any public building or facility or where the funds of counties, municipalities, or other political subdivisions are utilized for the construction or alteration of elementary, secondary or community college buildings and facilities that the plans and specifications for such buildings and facilities are reviewed by the Division of the State Architect (DSA) and certified to be in compliance with California law requiring access for persons with disabilities prior to a contract being awarded.

Authority: Government Code Sections 4450, 4453 and 4454. Reference: Government Code Section 4454.

#### HISTORY:

- New Group 2 (§§ 81 through 86) filed 3-5-71 as an emergency; effective on filing. Certificate of Compliance included (Register 71, No. 10). For history of former Group 2 see Register 66, No. 38.
- 2. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).

**5-102. General.** For the purpose of assuring compliance with minimum requirements for accessibility by persons with disabilities, the governmental agency controlling the appropriation from which the project is funded shall submit an application, together with plans and full, complete, and accurate specifications and filing fee, to the State Architect. The DSA will process the documents. Written approval shall be obtained prior to award of a construction contract.

**Authority:** Government Code Section 4453. **Reference:** Government Code Section 4454.

#### HISTORY:

1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).

**5-103. Application.** For each project to be reviewed and certified, a separate application (Form DSA-1) shall be submitted to the DSA. The application shall be accompanied by a complete set of project plans and specifications and an appropriate filing fee (see Section 5-104).

The above documents shall be submitted to one of the following regional offices:

DIVISION OF THE STATE ARCHITECT SAN FRANCISCO BAY AREA REGIONAL OFFICE 1515 Clay Street, Suite 1201 Oakland, California 94612

> DIVISION OF THE STATE ARCHITECT SACRAMENTO REGIONAL OFFICE 1102 Q Street, Suite 5200 Sacramento, CA 95811

DIVISION OF THE STATE ARCHITECT LOS ANGELES BASIN REGIONAL OFFICE 700 N. Alameda Street, Suite 5-500 Los Angeles, California 90012

DIVISION OF THE STATE ARCHITECT SAN DIEGO REGIONAL OFFICE 16680 West Bernardo Drive San Diego, CA 92127

The application shall be considered received when all the required documents and fees have been received by the office and the application number assigned.

The documents submitted for review and used for certification shall be retained by the DSA.

**Authority:** Government Code Section 4454. **Reference:** Government Code Section 4454.

#### HISTORY:

- Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47). For prior history, see Register 76, No. 25.
- 2. Renumbering and amendment of former Section 83 to Section 83.1 filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).
- 3. Erratum to reflect locations of offices.

#### 5-104. Fees.

(a) The filing fee for projects under applications received on or after September 1, 1984 shall be two-tenths of one percent (0.2%) of the first \$500,000.00 of the estimated project cost plus one-tenth of one percent (0.1%) of the project cost greater than \$500,000.00 up to and including \$2,000,000.00 plus one-hundredth of one percent (0.01%) of the excess of the estimated project cost over \$2,000,000.00, except that the minimum fee in any case shall be \$200.00.

Example of filing fee to accompany application:

Estimated project cost = \$250,000.00

 $.002 \times \$250,000.00 = \$500.00$ 

Estimated project cost = \$1,500,000.00

 $.002 \times \$500,000.00 = \$1,000.00$  $.001 \times \$1,000,000.00 = \frac{1,000.00}{\$2,000.00}$ 

Estimated project cost = \$5,000,000.00

 $.002 \times \$500,000.00 = \$1,000.00$   $.001 \times \$1,500,000.00 = 1,500.00$  $.0001 \times \$3,000,000.00 = \frac{300.00}{\$2,800.00}$ 

- (b) The fee schedule in effect at the time of filing shall apply throughout the duration of such application.
- (c) If the actual project cost exceeds the estimated cost by more than 5 percent, a further fee for such projects shall become due and shall be equal to the difference between the filing fee paid and the amount computed under the schedule above using the actual cost of the project. The actual project cost shall be determined as directed in Section 5-105 and billed according to Section 5-107.
- (d) If the applicant requests the cancellation or withdrawal of the application and return of the plans and specifications and filing fee, this shall be granted unless the review has begun. No portion of the filing fee can be returned after the review has started.

Authority: Government Code Section 4453. Reference: Government Code Section 4454.

#### HISTORY:

- New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35)
- 2. (OSA/AC-A 1/89) Editorial transfer from CCR, Title 21 to Title 24 11-1-89.
- (OSA/AC-A 2/89) Amend CCR, Title 24, Part 1, Sec. 5-104 (a) (b), effective 1-1-90. Approved by Building Standards Commission 10-30-89.
- 4. (OSA/AC EF 1/92) Emergency order by the Office of the State Architect/Access Compliance to amend Section 5-104 (a), Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state February 25, 1992; effective March 1, 1992. Approved as an emergency by the California Building Standards Commission on February 24, 1992.
- 5. (OSA/AC EF 1/92) Emergency order by the Office of the State Architect/Access Compliance to amend Section 5-104 (a), Part I, Title 24, California Code of Regulations; approved by the California Building Standards Commission on February 24, 1992; filed as an emergency order with the secretary of state February 25, 1992, and effective March 1, 1992, has lapsed. No action was taken by the OSA/AC to make these regulations permanent; therefore, the initial regulations are back in effect as of June 29, 1992.

**5-105. Project cost.** For purposes of determining the fees, both the estimated and actual project cost shall be the cost for the total outlay contemplated for all work included in the certified plans and specifications. The term "project" shall be defined as all buildings and other structures, together with the development of the site, but in the event the plans and specifications submitted with the application do not provide for the construction of, addition or alteration to a building or structure, then it shall be for the site development proposed in the application.

The actual project cost shall include all items, which are normally considered to be contractors operation costs. Addenda or change order items which increase the contract amount shall be included in the final actual project cost computation.

All fees and/or reimbursable charges paid the construction managers shall be included in the actual project cost. When the contract for the work includes items not otherwise subject to the approval of the office and not included in the approved plans and specifications the actual cost shall include this work unless such costs are segregated by separate bid items or by separately priced items of change orders, or by a certified copy of the subcontractor's bid. Such segregation shall not be made by contract price breakdown or estimates.

**Authority:** Government Code Section 4454. **Reference:** Government Code Section 4454.

#### HISTORY:

New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2 (d) (Register 84, No. 35).

**5-106.** Revision of plans and specifications. No additional fee is charged upon submission of revisions to the approved plans and specifications, provided that the entire matter is actually one transaction having to do with the same project and the revisions do not require substantial review for accessibility. If the original plans are abandoned and the plans and specifications submitted in lieu thereof are in fact for a new project rather than an identical project, or where a modified set of plans is for an essentially different concept, it is necessary that a new application be filed and a fee paid. This is regardless of the fact that the project may have the same name, be of the same general size, and be situated at the same location as the project for which the original application was made.

**Authority:** Government Code Section 4454. **Reference:** Government Code Section 4454.

#### HISTORY:

New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).

**5-107.** Billing for further fees. For public school projects the DSA shall determine whether or not further fees are due and shall bill the district for such further fees.

For projects other than public schools, the applicant or owner shall submit to the office a report verifying the actual project cost within 90 days after the completion of the project. This actual project cost shall be the basis for the further fee computation. The accuracy and timely submission of this actual project cost report shall be the responsibility of the owner or his designated agent. The owner shall be billed for further fees upon completion of the project or portion thereof if fee is due.

**Authority:** Government Code Section 4454. **Reference:** Government Code Section 4454.

#### HISTORY:

 New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2 (d) (Register 84, No. 35).

**5-108. Refunds.** Claims for refunds of five dollars or less due to errors in cost reporting or fee computation shall be made within one year from the date of payment.

**Authority:** Government Code Section 4454. **Reference:** Government Code Section 4454.

#### HISTORY:

 New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).

**5-109. Review of plans and specifications.** The DSA will review the submitted documents to ensure that the requirements cited in Article 1 are fully met.

**Authority:** Government Code Section 4453. **Reference:** Government Code Section 4454.

#### HISTORY:

1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).

#### 5-110. Written approval.

- (a) **Approval obtained.** Upon completion of review, DSA will return to the awarding authority a written approval, if the documents comply with the requirements. This approval of the application constitutes the "written approval" required by Section 4454 of the Government Code. No changes or revisions shall be made following written approval, which affect access compliance items unless such changes or revisions are submitted to the DSA for approval.
- (b) **Approval denied.** If the documents fail to meet the requirements of these regulations, DSA will return to the awarding authority the plans with corrections noted thereon together with instructions for resubmittal of the plans and specifications. The corrected plans are the property of the Division of the State Architect and shall be returned within six months or the application will be void. No valid construction contract may be awarded before written approval is obtained.
- (c) **Unauthorized deviations.** In the event that there is an unauthorized deviation from the requirements of these regulations with respect to the standards specified, the same shall be rectified by full compliance there with within ninety (90) days after discovery of such deviation.
- (d) **Notification.** Where the State Architect is the enforcement authority and any project is proposed to be approved and such approval action would deny accessibility either required by Sections 4450 and 4458, inclusive, of the Government Code to persons with disabilities, or by reason of an equivalent facilitation exception granted pursuant to Section 4451 of the Government Code, the State Architect shall notify affected persons with disabilities or organizations and others who have made written requests to be informed as to such proposals under consideration.

**Authority:** Government Code Sections 4450 and 4460 and Health and Safety Code Section 18949. **Reference:** Government Code Sections 4460.

#### HISTORY:

- 1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).
- 2. New subsection (d) filed 3-6-81 as an emergency; effective upon filing (Register 81, No. 10). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 7-4-81.
- 3. Order of Repeal of 3-6-81 emergency order filed 3-13-81 by OAL pursuant to Government Code Section 11349.6 (Register 81, No. 11).
- 4. New subsection (d) filed 7-28-82; effective thirtieth day (Register 82, No. 31).
- 5. Amendment of subsection (a) filed 7-17-85; effective thirtieth day thereafter (Register 85, No. 29).

5-111. General requirements. General requirements and building standards are located in Title 24, Part 2.

# Article 2 DIVISION OF THE STATE ARCHITECT – ACCESS COMPLIANCE PROCESSING PRODUCT APPROVALS January 1, 2001

Detectable warning products and directional surfaces installed after January 1, 2001 shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect, Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**5-201. Processing independent entity evaluation approvals (IEEA).** Independent Entity Evaluation Approvals shall be registered in the Division of the State Architect (DSA) headquarters office.

To maintain a central file for all IEEA and to operate within the current DSA program, certain administration and all accounting shall be performed at the DSA headquarters office under the direction of the Principal Architect.

#### 5-202. IEEA Application procedure.

- 1. Upon receipt of an IEEA application, send the application fee and a copy of the application to the DSA headquarters office, attention: Access Compliance.
- 2. A paper file will be created for each IEEA, which will initially include a copy of the application and the application fee. Headquarters personnel will then file the product, manufacturer and registration information, creating an IEEA number.
- 3. The application fee will be given to the headquarters cashier for deposit.

#### 5-203. IEEA Acceptance procedure.

- 1. Prior to issuing IEEA acceptance, it is required that all fees be paid. If fees are due, please contact the manufacturer for payment and forward the payment to the DSA headquarters office, along with the request for the additional payment.
- 2. The fee, if any, will be given to the headquarters, cashier for filing and deposit.
- 3. The acceptance letter will be retained at DSA head quarters, Access Compliance. A copy of the status approval letter will be returned to the applicant.
- 4. Headquarters' personnel will register, prepare and distribute all necessary copies of the acceptance letter. The original file shall be maintained at headquarters.

**5-204. Accounting of IEEA.** Income for IEEA will be earned in the month in which they are banked. This money will be applied to Disability Access Account for deposit.

#### 5-205. Contacts for questions.

- 1. IEEA Contact, DSA headquarters, attention: Access Compliance, IEEA Program.
- Headquarters Administration Contact DSA headquarters, attention: Access Compliance, IEEA Program.
- 3. Headquarters Accounting Contact, DSA headquarters, Accounting.

**Authority:** Government Code Sections 4450, 4460 and Health & Safety Code Section 18949.1. **Reference:** Government Code Section 4460.

# Article 3 ACCEPTANCE OF DETECTABLE WARNING AND DIRECTIONAL SURFACE PRODUCTS FOR MANUFACTURERS AND DESIGN PROFESSIONALS January 1, 2001

Detectable warning products and directional surfaces installed after January 1, 2001 shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect, Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**5-301. Division of the State Architect, Access Compliance, acceptance of product.** The procedure for the DSA/AC acceptance of manufactured products is detailed in this article.

All products require prior evaluation by a recognized evaluation agency that has a program specifically intended for such purposes. DSA/AC shall review the evaluation report for compliance with related and appropriate national standards and Title 24 requirements.

- **5-301.1. Product submittal.** Products must meet the requirements of Section 5-301.
- **5-301.2.** Division of the State Architect, Access Compliance, products exempt from evaluation by a recognized agency. No products can be approved for use that do not require evaluation by a recognized evaluation agency.
- **5-301.3. Products evaluated by recognized state and city agencies.** No products can be approved by any state and city agencies for use that do not require evaluation by a recognized evaluation agency.
- **5-301.4. Products evaluated by a recognized evaluation agency.** Products must have, as a minimum, an approved report published by a nationally recognized evaluation agency. Without an evaluation report, the applicant will be required to obtain such a report or will be denied acceptance on DSA/AC projects. The report and its evaluation criteria may be reviewed for compliance with national standards.
- **5-301.5. Development of DSA acceptance criteria.** Development of new DSA/AC acceptance criteria shall be based on acceptance criteria from a recognized evaluation agency.
- **5-301.6. Marking.** Each detectable warning and directional surface products shall be provided with:
  - 1. Label indicating the DSA label number,
  - 2. Manufacturer's product number, and
  - Product approval expiration date.

Authority: Government Code Sections 4450 and 4460 and Health & Safety Code Section 18949.1.

Reference: Government Code Section 4460.

# Article 4 APPLICATION FOR INDEPENDENT ENTITY EVALUATION APPROVAL (IEEA)

5-401. Application for IEEA. The following form must be filed in duplicate:

APPLICATION FOR IEEA FORM (Filed in Duplicate)	
1. Product Name:	
2. Description of Product:	Expiration Date:
3. Intended Product Use:	
4. Company Name:	
5. Company Address:	
6. Contact Person:	
Title:	
Contact Person's Phone Number:	
Contact Person's Fax Number:	
7. Name of Applicant:	
8. Signature of Applicant:	Date:
9. Application Fee Submitted:	
Please make checks payable to Division of the State Ar	rchitect – Access Compliance
New Submitta Revised Subm	• •
Fees shown are for initial application. Additional time ex in excess of the initial fee will be billed on	
10. Return application, check and submittal to:	
Division of the State Architect – Access 1102 Q Street, Suite 5100 Sacramento, CA 95811	

#### **HISTORY NOTE APPENDIX**

# California Administrative Code California Code of Regulations, Title 24, Part 1

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

- 1. (DSA/AC 2/01) Adoption of detectable warning products and standards, Chapter 5, Articles 2, 3 and 4. Approved by the California Building Standards Commission on November 28, 2001. Filed with the Secretary of State on March 1, 2002, effective April 2, 2002.
- (DSA/AC 05/04) Changes without regulatory effect to addresses in Section 5-102 and an acronym in Section 5-202. Filed with Secretary of State on June 28, 2006 and effective 30th day after filing with Secretary of State.
- 3. (DSA/AC 03/06) Repeal of duplicate provisions and editorial and formatting amendments to administrative standards for implementing facility access in conformance with California Law and federally recognized accessibility standards. Effective January 1, 2008.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

# 2007 California Building Title 24 (T-24), Part 2 (Pt), California Code of Regulations (CCR)

# CALIFORNIA BUILDING CODE — MATRIX ADOPTION TABLE CALIFORNIA CHAPTER 1 — GENERAL CODE PROVISIONS

Adopting Agency		B S C	F		HC	D	D		08	SHPE	)	C S A	D H S	A G R	CEC	C A	_	S L C	
Adopt Entire Californ	ia Chapter			1	2	1/AC	AC	SS	1	2	3	4						#	_
Adopt entire Californi sections listed below	a Chapter as amended (amended)																		
Adopt only those sec	tions that are listed below						Х												
Chapter / Section	Codes																		
101	CA						Х												
109.1	CA						Х												

#### SECTION 101 GENERAL

- 101.1 Title. These regulations shall be known as the California Building Code, may be cited as such and will be referred to herein as "this code." The California Building Code is part 2 of 12 parts of the official compilation and publication of the adoption amendment and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2006 International Building Code of the International Code Council with necessary California amendments.
- **101.2 Purpose.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.
- [DSA-AC] The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other developments to which this code applies and to ensure that they are accessible to and usable by persons with disabilities.
- **101.3 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout the State of California.
  - **101.3.1 Nonstate-regulated buildings, structures, and applications.** Except as modified by local ordinance pursuant to Section 101.8, the following standards in the California Code of Regulations, Title 24, Parts 2, 3, 4, 5, 6, 9 and 10 shall apply to all occupancies and applications not regulated by a state agency.
  - 101.3.2 State-regulated buildings, structures, and applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions, shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 102 through 114, except where modified by local ordinance pursuant to Section 1018. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the State Legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

- State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed, by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 102 for additional scope provisions.
- 2. Local detention facilities regulated by the Corrections Standards Authority. See Section 103 for additional scope provisions.
- 3. Barbering, cosmetology or electrolysis establishments, acupuncture offices, pharmacies, veterinary facilities and structural pest control locations regulated by the Department of Consumer Affairs. See Section 104 for additional scope provisions.
- 4. Energy efficiency standards regulated by the California Energy Commission. See Section 105 for additional scope provisions.
- 5. Dairies and places of meat inspection regulated by the Department of Food and Agriculture. See Section 106 for additional scope provisions.
- Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles, and wild animal quarantine facilities regulated by the Department of Health Services. See Section 107 for additional scope provisions.
- 7. Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 108.2.1.1 for additional scope provisions.
- 8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of a "Covered multifamily dwelling" and common-use spaces serving covered multifamily dwellings which are regulated by Department of Housing and Community Development. See Section 108.2.1.2 for additional scope provisions.
- 9. Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 108.21.3 for additional scope provisions.
- 10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 109.1 for additional scope provisions.
- 11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 109.2 for additional scope provisions.
- 12. Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See Section 109.3 for additional scope provisions.
- 13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Health Services, and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 110 for additional scope provisions.

- 14. Applications regulated by the Office of State Fire Marshal include but are not limited to the following in accordance with Section 111:
  - 14.1. Buildings or structures used or intended for use as an:
    - 14.1.1. Asylum, jail.
    - 14.1.2. Mental hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.
    - 14.1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.
    - 14.1.4. Small family day care homes, large family daycare homes, residential facilities and residential facilities for the elderly, residential care facilities.
    - 14.1.5. State institutions or other state-owned or state-occupied buildings.
    - 14.1.6. High rise structures.
    - 14.1.7. Motion picture production studios.
    - 14.1.8. Organized camps.
    - 14.1.9. Residential structures.
  - 14.2. Tents, awnings or other fabric enclosures used in connection with any occupancy.
  - 14.3. Fire alarm devices, equipment and systems in connection with any occupancy.
  - 14.4. Hazardous materials, flammable and combustible liquids.
  - 14.5. Public school automatic fire detection, alarm, and sprinkler systems.
  - 14.6. Wild land urban interface fire areas.
- 15. Public libraries constructed and renovated using funds from the California Library Construction and Renovation Bond Act of 1988 and regulated by the State Librarian. See Section 112 for additional scope provisions.
- 16. Graywater systems regulated by the Department of Water Resources. See Section 113 for additional scope provisions.
- 17. For applications listed in Section 109.1 regulated by the Division of the State Architect—Access Compliance, outdoor environments and uses shall be classified according to accessibility uses described in Chapters 11A, 11B and 11C.
- 18. Marine Oil Terminals regulated by the California State Lands Commission see Section 114 for additional scope provisions.

**101.4 Appendices.** Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 101.8 of this code.

101.5 Referenced codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Prevention Association are permitted to be used as authoritative guides in determining recognized fire-prevention engineering practices.

101.6 Nonbuilding standards, orders and regulations. Requirements contained in the International Building Code, or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909, shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.

#### 101.7 Order of precedence and use.

- **101.7.1 Differences.** In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.
- **101.7.2 Specific provisions.** Where a specific provision varies from a general provision, the specific provision shall apply.
- **101.7.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirement shall prevail.

101.8 City, county, or city and county amendments, additions or deletions. The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 101.8.1. The effective date of amendments, additions, or deletions to this code of cities, counties, or city and counties filed pursuant to Section 101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18938(b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

#### 101.8.1 Findings and filings.

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

- The city, county, or city and county shall file the amendments, additions, or deletions expressly
  marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire
  departments shall file the amendments, additions or deletions, and the findings with the California
  Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
- 3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development at 1800 3<sup>rd</sup> Street, Room 260, Sacramento, CA 95814.

- **101.9 Effective date of this code.** Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.
- **101.10 Availability of codes.** At least one entire copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. See Health and Safety Code Section 18942 (d) (1) & (2).
- **101.11 Format.** This part fundamentally adopts the International Building Code by reference on a chapter-by-chapter basis. Such adoption is reflected in the Matrix Adoption Table of each chapter of this part. When the Matrix Adoption Tables make no reference to a specific chapter of the International Building Code, such chapter of the International Building Code is not adopted as a portion of this code.
- **101.12 Validity.** If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

### SECTION 109 DIVISION OF THE STATE ARCHITECT

#### 109.1 Division of the State Architect—Access Compliance.

**General.** The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other improvements to which this code applies in compliance with state law to ensure that these improvements are accessible to and usable by persons with disabilities. Additions, alterations and structural repairs in all buildings and facilities shall comply with these provisions for new buildings, except as otherwise provided and specified herein.

The provisions of these regulations shall apply to any portable buildings leased or owned by a school district, and shall also apply to temporary and emergency buildings and facilities. Temporary buildings and facilities are not of permanent construction but are extensively used or are essential for public use for a period of time. Examples of temporary buildings or facilities covered include, but are not limited to: reviewing stands, temporary classrooms, bleacher areas, exhibit areas, temporary banking facilities, temporary health screening services, or temporary safe pedestrian passageways around a construction site.

In addition, to incorporate standards at least as restrictive as those required by the federal government for barrier-free design under (1) Title III (Public Accommodations and Commercial Facilities), Subpart D (New Construction and Alteration) and Appendix A (Americans with Disabilities Act Standards for Accessible Design) (see 28 C.F.R., Part 36), and (2) Title II (Public Entities), Section 35.151 (New Construction and Alterations) (see 28 C.F.R., Part 35) both from the Americans with Disabilities Act of 1990, and (3) under the Fair Housing Amendments Act of 1988. Some of these regulations may be more stringent than state law in order to meet the federal requirement.

- **109.1.1 Application.** See Government Code commencing with Section 4450. Publicly funded buildings, structures, sidewalks, curbs and related facilities shall be accessible to and usable by persons with disabilities as follows:
  - **109.1.1.1** All buildings, structures, sidewalks, curbs and related facilities constructed in the state by the use of state, county or municipal funds, or the funds of any political subdivision of the state.
  - **109.1.1.2** All buildings, structures and facilities that are leased, rented, contracted, sublet or hired by any municipal, county, or state division of government, or by a special district.
  - **109.1.1.3** All publicly funded buildings used for congregate residences or for one- or two-family dwelling unit purposes shall conform to the provisions applicable to living accommodations.

- **109.1.1.4** All existing publicly funded buildings and facilities when alterations, structural repairs or additions are made to such buildings or facilities. For detailed requirements on existing buildings, see Chapter 11B, Division IV.
- **109.1.1.5** With respect to buildings, structures, sidewalks, curbs and related facilities not requiring a building permit, building standards published in the California Building Standards Code relating to access for persons with disabilities and other regulations adopted pursuant to Government Code Section 4450, and in effect at the time construction is commenced, shall be applicable.
- 109.1.2 Application. See Health and Safety Code commencing with Section 19952.

All privately funded public accommodations, as defined and commercial facilities, as defined, shall be accessible to persons with disabilities as follow:

**Exception:** Certain types of privately funded multistory buildings do not require installation of an elevator to provide access above and below the first floor. See Chapter 11B.

- **109.1.2.1** Any building, structure, facility, complex, or improved area, or portions thereof, which are used by the general public.
- **109.1.2.2** Any sanitary facilities which are made available for the public, clients or employees in such accommodations or facilities.
- **109.1.2.3** Any curb or sidewalk intended for public use that is constructed in this state with private funds.
- **109.1.2.4** All existing privately funded public accommodations when alterations, structural repairs or additions are made to such public accommodations as set forth under Chapter 11B.
- **109.1.3** Application—public housing and private housing available for public use. See Government Code Sections 4450 and 12955.1(d).

#### 109.1.4 Enforcing agency.

- **109.1.4.1** The director of the Department of General Services where state funds are utilized for any project or where funds of counties, municipalities or other political subdivisions are utilized for the construction of elementary, secondary or community college projects.
- **109.1.4.2** The governing bodies where funds of counties, municipalities or other political subdivisions are utilized except as otherwise provided above.
- **109.1.4.3** The building department of every city, county, or city and county within the territorial area of its city, county, or city and county, where private funds are utilized. "Building department" means the department, bureau or officer charged with the enforcement of laws or ordinances regulating the erection or construction, or both the erection and construction, of buildings.
- **109.1.5 Special conditions for persons with disabilities requiring appeals action ratification.** Whenever reference is made in these regulations to this section, the findings and determinations required to be rendered by the local enforcing agency shall be subject to ratification through an appeals process.
- 109.1.6 Authority cited. Government Code Section 4450.
- **109.1.7 Reference cited.** Government Code Sections 4450 through 4461, 12955.1(d) and Health and Safety Code Sections 18949.1, 19952 through 19959.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 2 – DEFINITIONS AND ABBREVIATIONS

Adopting Agency		B S C	S F			=				OSHPD			OSHPD			OSHPD			OSHPD		OSHPI		C S A	D H S	A G R	D W R	C A	S L	S L C
Adopt Entire Chapter						1/AC	AC	SS	1	2	3	4							Ľ										
Adopt entire Chapter as amended (amended sections																													
listed below)																		ш											
Adopt only those sections that are listed below							Х												1										
Chapter / Section	Codes																												
Access Aisle	CA						Х																						
Accessibility	CA						Х																						
Accessible	CA						Х																						
Accessible Element	CA						Х																						
Accessible Means of Egress	IBC						Х																						
Accessible Route	CA				İ		Х																						
Accessible Route of Travel	CA						Х																						
Accessible Space	CA				İ		Х																						
Adaptability	CA						Х																						
Adaptable Dwelling Unit	CA						Х																						
Addition	CA						Х											$\Box$											
Administrative Authority	CA						X																						
Aisle	CA						Х																						
Aisle, Employee Areas	CA						Х																						
Alteration (or Alter)	CA						X																						
Alternate Card Reader	CA						Х																						
ANSI	CA						Х																						
Approved w/o Notes	CA						X																						
Approved Testing Agency	CA						Х																						
Area of Refuge	IBC						Х																						
Assembly Area	CA						Х																						
Assistive Device	CA						Х																						
Automatic Door	CA						Х																						
Bathroom	CA						Х																						
Building	IBC						Х																						
Building Entrance on an Accessible Route	CA						Х																						
Building, Existing	CA						Х																						
Building Official	IBC						Х																						
CCR	CA						Х																						
Circulation Path	CA						Х																						
Clear	CA						Х																						
Clear Floor Space	CA						Х																						
Closed-Circuit Telephone	CA						Х																						
Commercial Facilities	CA						Х																						
Common Use Areas	CA						Х																						
Covered Multifamily Dwellings	CA						Х																						
Cross Slope	CA						Х																						
Curb Cut	CA				İ		Х																						
Curb Ramp	CA						Х																						
Detectable Warning	CA						X												<u> </u>										

Directional Sign	CA			Х							 
Disability	CA			Х							 
Disabled	CA			Х							 
Dormitory	IBC			Х							
Dwelling Unit	CA			Х							
Element	CA			Х							
Elevator, Passenger	CA			Х							
Enforcing Agency	CA			Х							
Entrance	CA			Х							
Equivalent Facilitation	CA			Х							
Existing Building	IBC			Х							
Exit	IBC			Х							
Facility (or Facilities)	CA			Х							
Free-standing Pedestal	CA			Х							
Grab Bar	CA			Х							
Grade (Adjacent Ground Elevation)	CA			Х							
Ground Floor	CA			Х							
Guard (or Guardrail)	IBC			Х							
Handrail	IBC			Х							
Health Care Provider	CA			Х							
Historical Building	CA			Х							
Hotel or Motel	CA			Х							
Independent Entity	CA			Х							
International Symbol of Accessibility	CA			Х							
Kick Plate	CA			Х							
Level Accessible Area	CA			Х							
Level Area	CA			Х							
Lift, Special Access	CA			Х							
Marked Crossing	CA			Х							
Motel	CA			Х							
Multistory Dwelling Unit	CA			Х							
Multiple-Accommodation Toilet Facility	CA			Х							
Newly Constructed	CA			Х							
Nosing (or Nose)	CA			Х							
NFPA	CA			Х							
Occupiable Space	IBC			Х							
Open Riser	CA			Х							
Operable Part	CA			Х							
Passage Door	CA			Х							
Passenger Elevator	CA			Х							
Path of Travel	CA			Х							
Pedestrian	CA			Х							
Pedestrian Grade Separation	CA			Х							
Pedestrian Ramp	CA			Х							
Pedestrian Way	CA			Х							
Permanent	CA	1		Х							
Permit	IBC			Х							
Persons with Disabilities	CA	1		Х							
Platform	IBC			Х							
Powder Room	CA	1		Х	1						
Power-assisted Door	CA	1		Х							
Professional Office of a Health Care Provider	CA	1		Х							
Public Accommodation	CA	1		Х							
Publicly Funded	CA			Х							

Public-Use Areas	IBC				Х							
Public Way	IBC				X						_	
Qualified Historical Building (or Property)	CA				X						_	
Rail Transit Boarding Platform	CA				X		<u></u>					
Ramp	CA				X						_	
Reasonable Portion	CA				X						_	
Recommend	CA										_	
					X						_	
Remodeling	CA		-		X							
Repair	IBC				X						$\rightarrow$	
Riser	CA				Х						-	
Running Slope	CA				Х							
Sanitary Facility	CA				Х							
Shall	CA				Х							
Shopping Center or Shopping Mall	CA				Χ							
Should	CA				X							
Sidewalk	CA	_			X							
Signage	CA				Х							
Single-Accommodation Sanitary Facility	CA				Χ							
Site	IBC				Χ							
Site Development	CA				X							
Sleeping Accommodations	CA				Χ							
Slope	CA				Х							
Space	CA				Х							
Special Access Lift	CA				Х							
Specified Public Transportation	CA				Х							
Stage	IBC				Х							
Stair	IBC				Х							
Stairway	IBC				X							
Story	CA				X						_	
Story, First	CA				Х						_	
Structural Frame	CA				Х						_	
Structure	IBC				Х						_	
Tactile	CA				X						_	
Technically Infeasible	CA				X						_	
-	CA		-		X						_	
Temporary Text Telephone	CA										-	
	CA				X						_	
Toeboard	IBC										$\dashv$	
Townhouse					X						_	
Transient Lodging	CA		-		X							
Transit Boarding Platform	CA				Х							
Tread	CA				Х							
Tread Depth	CA		-	-	Х		_					
Tread Run	CA		1	1	Х		_					
Type of Motor Fuel	CA			<u> </u>	Х		_					
Unreasonable Hardship	CA		1	1	Х		_					
Vehicular or Pedestrian Arrival Points	CA		1		Х							
Vehicular Way	CA	_			X							
Walk	CA				Х							
Wheelchair	CA				Χ							
Wheelchair Occupant (or Wheelchair User)	CA				Х							
Work Station	CA				Х		T					

#### SECTION 202 DEFINITIONS

ACCESS AISLE. [DSA-AC] See Chapter 11B, Section 1102B.

ACCESSIBILITY. [DSA-AC] See Chapter 11A, Section 1107A.1-A, and Chapter 11B, Section 1102B.

ACCESSIBLE. [DSA-AC] See Chapter 11A, Section 1107A.1-A, and Chapter 11B, Section 1102B.

ACCESSIBLE ELEMENT. [DSA-AC] See Chapter 11B, Section 1102B.

ACCESSIBLE MEANS OF EGRESS. See Section 1002.1.

ACCESSIBLE ROUTE. [DSA-AC] See Chapter 11A, Section 1107A.1-A.

ACCESSIBLE ROUTE OF TRAVEL. [DSA-AC] See Chapter 11B, Section 1102B.

ACCESSIBLE SPACE. [DSA-AC] See Chapter 11B, Section 1102B.

ADAPTABILITY. [DSA-AC] See Chapter 11B, Section 1102B.

ADAPTABLE DWELLING UNIT. [DSA-AC] See Chapter 11A, Section 1107A.1-A.

#### ADDITION. ...

[DSA-AC] "Addition" is an extension, expansion, or increase in floor area or height of a building, facility or structure.

ADMINISTRATIVE AUTHORITY. [DSA-AC] See Chapter 11B, Section 1102B.

#### AISLE. ...

[DSA-AC] See Chapter 11B, Section 1102B.

AISLE, EMPLOYEE AREAS. [DSA-AC] See Chapter 11B, Section 1102B.

#### ALTERATION or ALTER. ...

[DSA-AC] "Alteration or Alter" is any change, addition or modification in construction or occupancy or structural repair or change in primary function to an existing structure made by, on behalf of, or for the use of a public accommodation or commercial facility, that affects or could affect the usability of the building or facility or part thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions.

ALTERNATE CARD READER. [DSA-AC] See Chapter 11C, Section 1101C.1.

ANSI. [DSA-AC] means the American National Standards Institute.

#### APPROVED....

[DSA-AC] "Approved" means meeting the approval of the enforcing agency, except as otherwise provided by law, when used in connection with any system, material, type of construction, fixture or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities or technical, health, or scientific organizations or agencies.

#### Notes:

- See Health and Safety Code Section 17920 for "Approved" as applied to residential construction and buildings or structures accessory thereto, as referenced in Section 108.2.1.1.
- See Health and Safety Code Section 17921.1 for "Approved" as applied to the use of hotplates in residential construction referenced in Section 108.2.1.1.

- 3. See Health and Safety Code Section 17921.3 for "Approved" as applied to low-flush water closets in residential construction, as referenced in 108.2.1.1.
- 4. See Health and Safety Code Section 19966 for "Approved" as applied to factory-built housing as referenced in Section 108.3.2.5.
- 5. See Health and Safety Code Section 18201 for "Approved" as applied to mobilehome parks as referenced in Section 108.2
- 6. See Health and Safety Code Section 18862.1 for "Approved" as applied to special occupancy parks as referenced in Section 108.2.

**APPROVED TESTING AGENCY. [DSA-AC]** is any agency, which is determined by the enforcing agency, except as otherwise provided by statute, to have adequate personnel and expertise to carry out the testing of systems, materials, type of construction, fixtures or appliances.

AREA OF REFUGE. See Section 1002.1.

ASSEMBLY AREA. [DSA-AC] See Chapter 11B, Section 1102B.

ASSISTIVE DEVICE. [DSA-AC] See Chapter 11A, Section 1107A.1-A.

AUTOMATIC DOOR. [DSA-AC] See Chapter 11A, Section 1107A.1-A, and Chapter 11B, Section 1102B.

BATHROOM. [DSA-AC] See Chapter 11A, Section 1107A.2-B.

**BUILDING.** Any structure used or intended for supporting or sheltering any use or occupancy.

BUILDING ENTRANCE ON AN ACCESSIBLE ROUTE. [DSA-AC] See Chapter 11A, Section 1107A.2-B.

**BUILDING, EXISTING. [DSA-AC]** is a building erected prior to the adoption of this code, or one for which a legal building permit has been issued.

**BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

CCR. [DSA-AC] means the California Code of Regulations.

CIRCULATION PATH. [DSA-AC] See Chapter 11B, Section 1102B.

CLEAR. [DSA-AC] See Chapter 11B, Section 1102B.

CLEAR FLOOR SPACE. [DSA-AC] See Chapter 11B, Section 1102B.

CLOSED-CIRCUIT TELEPHONE. [DSA-AC] See Chapter 11B, Section 1102B.

**COMMERCIAL FACILITIES [DSA-AC]** are facilities that are intended for nonresidential use and whose operations will affect commerce, including factories, warehouses, office buildings, and other buildings in which employment may occur. Commercial facilities shall not include railroad locomotives, railroad freight cars, railroad cabooses, railroad cars covered under Title II of the Americans with Disabilities Act of 1990, or facilities that are covered or expressly exempted from coverage under the Fair Housing Amendment Act of 1988 (42 USC 3601-3631, et seq).

COMMON USE AREAS. [DSA-AC] See Chapter 11A, Section 1107A.3-C, and Chapter 11B, Section 1102B.

COVERED MULTIFAMILY DWELLINGS. [DSA-AC] See Chapter 11A, Section 1107A.3-C.

CROSS SLOPE. [DSA-AC] See Chapter 11A, Section 1107A.3-C, and Chapter 11B, Section 1102B.

CURB CUT. [DSA-AC] See Chapter 11A, Section 1107A.3-C, and Chapter 11B, Section 1102B.

CURB RAMP. [DSA-AC] See Chapter 11A, Section 1107A.3-C, and Chapter 11B, Section 1102B.

DETECTABLE WARNING. [DSA-AC] See Chapter 11A, Section 1107A.4-D, and Chapter 11B, Section 1102B.

**DIRECTIONAL SIGN [DSA-AC]** is a publicly displayed notice which indicates by use of words or symbols a recommended direction or route of travel.

**DISABILITY [DSA-AC]** is (1) a physical or mental impairment that limits one or more of the major life activities of an individual, (2) a record of such an impairment, or (3) being regarded as having such an impairment.

DISABLED. [DSA-AC] See "Disability".

DORMITORY. See Section 308.4.6 and 310.2.

**DWELLING UNIT....** 

[DSA-AC] See Chapter 11A, Section 1107A.4-D, and Chapter 11B, Section 1102B.

**ELEMENT.** [DSA-AC] See Chapter 11B, Section 1102B.

ELEVATOR, PASSENGER. [DSA-AC] See Chapter 11B, Section 1102B.

ENFORCING AGENCY [DSA-AC] is the designated department or agency as specified by statute or regulation.

ENTRANCE. [DSA-AC] See Chapter 11B, Section 1102B.

EQUIVALENT FACILITATION. [DSA-AC] See Chapter 11A, Section 1107A.5-E, and Chapter 11B, Section 1102B.

EXISTING BUILDINGS. [DSA-AC] See "Building, Existing."

EXIT. See Section 1002.1.

FACILITY (or FACILITIES). [DSA-AC] See Chapter 11A, Section 1107A.6-F, and Chapter 11B, Section 1102B.

FREE-STANDING PEDESTAL. [DSA-AC] See Chapter 11C, Section 1101C.1.

GRAB BAR. [DSA-AC] See Chapter 11A, Section 1107A.7-G, and Chapter 11B, Section 1102B.

**GRADE (Adjacent Ground Elevation) [DSA-AC]** is the lowest point of elevation of the finished surface of the ground, paving or sidewalk within the area between the building and the property line or, when the property line is more than 5 feet (1524 mm) from the building, between the building and a line 5 feet (1524 mm) from the building. See Health and Safety Code Section 19955.3 (d).

**GROUND FLOOR. [DSA-AC]** See Chapter 11A, Section 1107A.7-G.

GUARD [DSA-AC] or GUARDRAIL. See Section 1002.1.

HANDRAIL. See Section 1002.1.

**HEALTH CARE PROVIDER. [DSA-AC]** See "Professional Office of a Health Care Provider" in Chapter 11B, Section 1102B.

**HISTORICAL BUILDINGS. [DSA-AC]** See Qualified Historical Building or Property, Chapter 34, Division II, Section 8-218-Q."

**HOTEL or MOTEL [DSA-AC]** is any building containing six or more guest rooms intended or designed to be used, or which are used, rented or hired out to be occupied, or which are occupied for sleeping purposes by guests.

**INDEPENDENT ENTITY [DSA-AC]** is a not-for-profit product safety testing and certification organization, dedicated to testing for public safety. An independent entity would operate for the testing, certification and quality assessment of products, systems and services.

INTERNATIONAL SYMBOL OF ACCESSIBILITY. [DSA-AC] See Chapter 11A, Section 1107A.9-I, and Chapter 11B, Section 1102B.

**KICK PLATE. [DSA-AC]** See Chapter 11A, Section 1107A.11-K, and Chapter 11B, Section 1102B Definitions as applicable.

LEVEL ACCESSIBLE AREA. [DSA-AC] See Chapter 11C, Section 1101C.1.

LEVEL AREA. [DSA-AC] See Chapter 11A, Section 1107A.12-L, and Chapter 11B, Section 1102B.

LIFT, SPECIAL ACCESS. [DSA-AC] See "Special access lift" Chapter 11A, Section 1107A.12-L, and Chapter 11B, Section 1102B.

MARKED CROSSING. [DSA-AC] See Chapter 11A, Section 1107A.13-M, and Chapter 11B, Section 1102B.

MOTEL. [DSA-AC] See "Hotel or Motel."

**MULTIPLE-ACCOMMODATION TOILET FACILITY [DSA-AC]** is a room that has more than one sanitary fixture, is intended for the use of more than one person at a time, and which usually is provided with privacy compartments or screens shielding some fixtures from view. A bathroom serving a hotel guest room and a privacy toilet in small offices, stores and similar locations are not included in this category.

MULTISTORY DWELLING UNIT. [DSA-AC] See Chapter 11A, Section 1107A.13-M.

NEWLY CONSTRUCTED. [DSA-AC] See Chapter 11A, Section 1107A.14-N.

**NFPA [DSA-AC]** is the National Fire Protection Association.

NOSING (or NOSE). ...

[DSA-AC] See Chapter 11A, Section 1107A.14-N, and Chapter 11B, Section 1102B.

**OCCUPIABLE SPACE.** A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress and light and ventilation facilities meeting the requirements of this code.

OPEN RISER. [DSA-AC] See Chapter 11A, Section 1107A.15-O, and Chapter 11B, Section 1102B.

OPERABLE PART. [DSA-AC] See Chapter 11B, Section 1102B.

PASSAGE DOOR. [DSA-AC] See Chapter 11A, Section 1107A.16-P, and Chapter 11B, Section 1102B.

PASSENGER ELEVATOR. [DSA-AC] See "Elevator, passenger" in Chapter 11B, Section 1102B.

PATH OF TRAVEL. [DSA-AC] See Chapter 11B, Section 1102B.

PEDESTRIAN. [DSA-AC] See Chapter 11A, Section 1107A.16-P, and Chapter 11B, Section 1102B.

PEDESTRIAN GRADE SEPARATION. [DSA-AC] See Chapter 11B, Section 1102B.

PEDESTRIAN RAMP. [DSA-AC] See Chapter 11A, Section 1107A.16-P, and Chapter 11B, Section 1102B.

PEDESTRIAN WAY. [DSA-AC] See Chapter 11A, Section 1107A.16-P, and Chapter 11B, Section 1102B.

**PERMANENT [DSA-AC]** shall mean facilities, which, are intended to be used for periods longer than those designated in this code under the definition of "Temporary."

**PERMIT.** An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity.

PERSONS WITH DISABILITIES. [DSA-AC] See Chapter 11A, Section 1107A.16-P.

PLATFORM. See Section 410.2.

POWDER ROOM. [DSA-AC] See Chapter 11A, Section 1107A.16-P.

**POWER-ASSISTED DOOR [DSA-AC]** is a door used for human passage with a mechanism that helps to open the door, or relieves the opening resistance of a door, upon the activation of a switch or a continued force applied to the door itself.

PROFESSIONAL OFFICE OF A HEALTH CARE PROVIDER. [DSA-AC] See Chapter 11B, Section 1102B.

**PUBLIC ACCOMMODATION.** [**DSA-AC**] includes, but is not limited to, any building or facility or other specific public use facilities not listed in Items 1 through 12 if they fall into one or more of the following categories:

- 1. Places of public lodging.
- 2. Establishments serving food or drink open to public use.
- 3. Places of exhibition or entertainment open to public use.
- 4. Places of public gathering.
- 5. Sales or rental establishments open to public use.
- 6. Service establishments open to public use.
- 7. Stations used for public transportation.
- 8. Places of public display or collection.
- 9. Places of public recreation.
- 10. Places of public education.
- 11. Social service center establishments open to public use.
- 12. Places of exercise or recreation open to public use.

Examples of public accommodations for purposes of this code shall include, but not be limited to, the following private entities.

- 1. An inn, hotel, motel or other place of public lodging, except for a lodging house located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of such establishment as the residence of such proprietor.
- 2. A restaurant, bar, or other establishment serving food or drink.
- 3. A motion picture house, theater, concert hall, stadium or other place of exhibition or entertainment.
- 4. An auditorium, convention center, lecture hall, or other place of public gathering.

- A bakery, grocery store, clothing store, hardware store, shopping center, or other sales or retail establishment.
- 6. A Laundromat, dry cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital or other service establishment.
- 7. A terminal, depot, or other station used for specified public transportation.
- 8. A museum, library, gallery, or other place of public display or collection.
- 9. A park, zoo, amusement park, or other place of recreation.
- A nursery, elementary, secondary, undergraduate or postgraduate private school, or other place of education.
- 11. A day care center, senior citizen center, homeless shelter, food bank, adoption agency or other social service center establishment.
- 12. A gymnasium, health spa, bowling alley, golf course or other place of exercise.
- 13. A church.
- 14. An office building.
- 15. A public curb or sidewalk.

PUBLIC-USE AREAS. [DSA-AC] See Chapter 11A, Section 1107A.16-P, and Chapter 11B, Section 1102B.

PUBLIC WAY. See Section 1002.1.

**PUBLICLY FUNDED [DSA-AC]** for the purpose of housing, all buildings, structures, sidewalks, curbs and related facilities constructed in the state and used or intended to be used as a public use area, as defined in Section 1107A.16-P, shall comply with the accessibility standards of Chapter 11B of this code when state, county or municipal funds, or funds of any political subdivision of the state are used.

QUALIFIED HISTORICAL BUILDING (or PROPERTY). [DSA-AC] See C.C.R. Title 24, Part 8.

RAIL TRANSIT BOARDING PLATFORM. [DSA-AC] See "Transit boarding platform" in Chapter 11B, Section 1102B.

RAMP....

[DSA-AC] See Chapter 11A, Section 1107A.18-R.

**REASONABLE PORTION [DSA-AC]** shall mean that segment of a building, facility, area, space or condition, which would normally be necessary if the activity therein is to be accessible by persons with disabilities.

**RECOMMEND [DSA-AC]** does not require mandatory acceptance, but identifies a suggested action that shall be considered for the purpose of providing a greater degree of accessibility to persons with disabilities.

REMODELING. [DSA-AC] See "Alteration or Alter."

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

RISER. [DSA-AC] See Chapter 11A, Section 1107A.18-R, and Chapter 11B, Section 1102B.

RUNNING SLOPE. [DSA-AC] See Chapter 11B, Section 1102B.

**SANITARY FACILITY [DSA-AC]** is any single water closet, urinal, lavatory, bathtub or shower, or a combination thereof, together with the room or space in which they are housed.

SHALL. [DSA-AC] as used in this code means mandatory.

SHOPPING CENTER (or SHOPPING MALL). [DSA-AC] See Chapter 11B, Section 1102B.

SHOULD. [DSA-AC] See "Recommend."

**SIDEWALK [DSA-AC]** is a surfaced pedestrian way contiguous to a street used by the public. (As differentiated from the definition of "Walk" in Chapter 11A, Section 1107A.23-W and Chapter 11B, Section 1102B.)

SIGNAGE [DSA-AC] is displayed verbal, symbolic, tactile, and/or pictorial information.

**SINGLE-ACCOMMODATION SANITARY FACILITY [DSA-AC]** is a room that has not more than one of each type of sanitary fixture, is intended for use by only one person at a time, has no partition around the toilet, and has a door that can be locked on the inside by the room occupant.

SITE [DSA-AC] is a parcel of land bounded by a property line or a designated portion of a public right of way.

**SITE DEVELOPMENT [DSA-AC]** is "on-site" and "off-site" work, including, but not limited to, walks, sidewalks, ramps, curbs, curb ramps, parking facilities, stairs, planting areas, pools, promenades, exterior gathering or assembly areas and raised or depressed paved areas.

**SLEEPING ACCOMMODATIONS. [DSA-AC]** See Chapter 11A, Section 1107A.19-S, and Chapter 11B, Section 1102B.

SLOPE. [DSA-AC] See Chapter 11A, Section 1107A.19-S.

**SPACE [DSA-AC]** is a definable area, e.g., a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.

SPECIAL ACCESS LIFT. [DSA-AC] See Chapter 11A, Section 1107A.19-S, and Chapter 11B, Section 1102B.

SPECIFIED PUBLIC TRANSPORTATION. [DSA-AC] See Chapter 11B, Section 1102B.

STAGE. See Section 410.2.

STAIR. See Section 1002.1.

STAIRWAY. See Section 1002.1.

STORY....

[DSA-AC] See Chapter 11B, 1102B.

STORY, FIRST. [DSA-AC] See Chapter 11B, Section 1102B.

STRUCTURAL FRAME. [DSA-AC] See Chapter 11B, Section 1102B.

**STRUCTURE.** That which is built or constructed.

TACTILE. [DSA-AC] describes an object that can be perceived using the sense of touch.

#### TECHNICALLY INFEASIBLE. ...

**[DSA-AC]** "Technically Infeasible" means, with respect to an alteration of a building or a facility, that it has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

**TEMPORARY [DSA-AC]** shall mean buildings and facilities intended for use at one location for not more than one year and seats intended for use at one location for not more than 90 days.

TEXT TELEPHONE. [DSA-AC] See Chapter 11B, Section 1102B.

TOEBOARD. [DSA-AC] See Chapter 11A, Section 1107A.20T.

#### TOWNHOUSE....

[DSA-AC] For applications required to provide accommodations for persons with disabilities, see Chapter 11A, Section 1107A.20-T.

TRANSIENT LODGING. [DSA-AC] See Chapter 11B, Section 1102B, and Chapter 11A, Section 1107A.20-T.

TRANSIT BOARDING PLATFORM. [DSA-AC] See Chapter 11B, Section 1102B.

TREAD. [DSA-AC] See Chapter 11A, Section 1107A.20-T, and Chapter 11B, Section 1102B.

TREAD DEPTH. [DSA-AC] See Chapter 11A, Section 1107A.20-T, and Chapter 11B, Section 1102B.

TREAD RUN. [DSA-AC] See Chapter 11A, Section 1107A.20-T, and Chapter 11B, Section 1102B.

TYPE OF MOTOR FUEL. [DSA-AC] See Chapter 11C, Section 1101C.1.

**UNREASONABLE HARDSHIP [DSA-AC]** exists when the enforcing agency finds that compliance with the building standard would make the specific work of the project affected by the building standard unfeasible, based on an overall evaluation of the following factors:

- 1. The cost of providing access.
- 2. The cost of all construction contemplated.
- 3. The impact of proposed improvements on financial feasibility of the project.
- 4. The nature of the accessibility which would be gained or lost.
- 5. The nature of the use of the facility under construction and its availability to persons with disabilities.

The details of any finding of unreasonable hardship shall be recorded and entered in the files of the enforcing agency.

VEHICULAR OR PEDESTRIAN ARRIVAL POINTS. [DSA-AC] See Chapter 11A, Section 1107A.22-V.

VEHICULAR WAY. [DSA-AC] See Chapter 11B, Section 1102B.

WALK. [DSA-AC] See Chapter 11A, Section 1107A.23-W, and Chapter 11B, Section 1102B.

**WHEELCHAIR [DSA-AC]** is a chair mounted on wheels to be propelled by its occupant manually or with the aid of electric power, of a size and configuration conforming to the recognized standard models of the trade.

WHEELCHAIR OCCUPANT (or WHEELCHAIR USER) [DSA-AC] is an individual who, due to a physical impairment or disability, utilizes a wheelchair for mobility.

#### WORK STATION....

[DSA-AC] See Chapter 11B, Section 1102B.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 3 — USE AND OCCUPANCY CLASSIFICATION

Adopting Agency			S F M		HC	CD	DS	SA .		OSH	PD		C S A	D H S	G	D W R	Ε	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire Chapter as Amended (amended sections listed below)  Adopt only those sections that are listed below							Х													
Chapter / Section																				
302.1	IBC						Х													
310.2 (Dormitory)	IBC						Х													

#### SECTION 302 CLASSIFICATION

**302.1 General.** Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

- 1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5
- 2. Business (see Section 304): Group B
- 3. Educational (see Section 305): Group E
- 4. Factory and Industrial (see Section 306): Groups F-1 and F-2
- 5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5
- 6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4
- 7. Mercantile (see Section 309): Group M
- 8. [SFM] Organized Camps (see Section 440) Group C
- 9. Research Laboratories (see Section 443) Group L
- 10. Residential (see Section 310): Groups R-1, R-2, R-3, R-3.1, and R-4
- 11. Storage (see Section 311): Groups S-1 and S-2
- 12. Utility and Miscellaneous (see Section 312): Group U

### SECTION 310 RESIDENTIAL GROUP R

#### 310.2 Definitions.

**DORMITORY.** A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

Adopting Agency			S F M		Н	CD	DS	SA	C	DSH	IPD		C S A	D H S	W	Е	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4						$\Box$	
Adopt entire Chapter as Amended listed below) Adopt only those sections that are	e listed below						Х												
Chapter / Section	Codes																		
406.2.2	IBC CA1						Х												
410.2 Platform & Stages	IBC						Х												
412.1.6	CA						Х												

# SECTION 406 MOTOR-VEHICLE-RELATED OCCUPANCIES

#### 406.2 Parking garages.

**406.2.2 Clear height.** The clear height of each floor level in vehicle and pedestrian traffic areas shall not be less than 7 feet (2134 mm). [DSA—AC] The clear height of vehicle and pedestrian areas required to be accessible shall comply with Chapter 11A or 11B, as applicable.

#### SECTION 410 STAGES AND PLATFORMS

#### 410.2 Definitions.

**PLATFORM.** A raised area within a building used for worship, the presentation of music, plays or other entertainment; the head table for special guests; the raised area for lecturers and speakers; boxing and wrestling rings; theater-in-the-round stages; and similar purposes wherein there are no overhead hanging curtains, drops, scenery or stage effects other than lighting and sound. A temporary platform is one installed for not more than 30 days.

**STAGE.** A space within a building utilized for entertainment or presentations, which includes overhead hanging curtains, drops, scenery or stage effects other than lighting and sound.

# SECTION 412 AIRCRAFT-RELATED OCCUPANCIES

# 412.1 Airport traffic control towers.

**412.1.6 Accessibility. [DSA-AC]** In air traffic control towers, an accessible route shall not be required to serve the cab and the equipment areas on the floor immediately below the cab.

<sup>&</sup>lt;sup>1</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, Part 2, 2007 California Building Code – In the Matrix Adoption Table, in the Codes column, for subsection 406.2.2, correct IBC to read: <del>IBC CA.</del>

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS

Adopting Agency		B S C	S F M		HCD		DS	SA		OSHPD		C S A	 A G R	W	C A	S L	S L C	
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4						
Adopt entire Chapter as amended (amended sections listed below)																		
Adopt only those secti below	ons that are listed																	
Chapter / Section	Codes																	

# SECTION 508 MIXED USE AND OCCUPANCY

# 508.3 Mixed occupancies.

### 508.3.1 Accessory occupancies.

#### **Exceptions:**

- 1.
- 2. Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of *Chapter 11B*.
- 3.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS

Adopting Agency		B S C	S F M		HC	CD	DS	SA		OSI	HPE	)	C S A	D H S	A G R	D W R	C E C	C A	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4							
Adopt entire Chapter as (amended sections liste																			
Adopt only those section below	ns that are listed						Х												
Chapter / Section	Codes																		
907.3.2	CA						Х												
907.9.1 w/ Exc. 1 & 2	CA						Х												
907.9.1.1	CA						Х												
907.9.1.2	IBC						Х												
907.9.1.3	IBC						Х												
Table 907.9.1.3	CA						Х												
907.9.1.4	CA						Х												
907.9.1.5	CA						Х												
907.9.2	CA						Х												
907.9.2.1	CA						Х												

# SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

# [F] 907.3 Manual fire alarm boxes.

# [F] 907.3.1 Location.

**[F] 907.3.2 Height.** The height of the manual fire alarm boxes shall be a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm), measured vertically, from the floor level to the *highest point of the* activating handle or lever of the box. *Manual fire alarm boxes shall also comply with Section 1117B.6 Item 4.* 

**Exception:** [DSA-AC] In existing buildings there is no requirement to retroactively relocate existing manual fire alarm boxes to a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm) from the floor level to the activating handle or lever of the box.

#### [F] 907.9 Alarm notification appliances.

**[F] 907.9.1 Visible alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.9.1.1 through *907.9.1.5*.

#### **Exceptions:**

- In other than Group I-2 and I-2.1, visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
- Visible alarm notification appliances shall not be required in enclosed exit stairways, exterior exit stairs, and exterior exit ramps.

**907.9.1.1 Public and common** *use* **areas.** Visible alarm notification appliances shall be provided in public *use* areas and common *use* areas, *including but not limited to:* 

1. Sanitary facilities including restrooms, bathrooms and shower rooms.

- 2. Corridors.
- 3. Music practice rooms.
- 4. Band rooms.
- 5. Gymnasiums.
- 6. Multipurpose rooms.
- 7. Occupational shops.
- 8. Occupied rooms where ambient noise impairs hearing of the fire alarm.
- 9. Lobbies.
- 10. Meeting rooms.
- 11. Classrooms.

**[F] 907.9.1.2 Employee work areas.** Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with a minimum of 20 percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing impaired employees.

**[F] 907.9.1.3 Groups I-1 and R-1.** Group I-1 and R-1 sleeping units in accordance with Table 907.9.1.3 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

# [F] TABLE 907.9.1.3 VISIBLE AND AUDIBLE ALARMS

TIOIDEE A	ND AUDIBLE ALARMO
NUMBER OF SLEEPING UNITS	SLEEPING UNITS WITH VISIBLE AND AUDIBLE ALARMS
6 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

[DSA-AC & SFM] Also see Chapter 11B, Section 1111B.4.5, Table 11B-3, and Table 11B-4.

**[F] 907.9.1.4 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with *NFPA 72*.

**[F] 907.9.1.5 Groups I-1, R-3.1 and R-4.** Protective social care facilities which house persons who are hearing impaired, shall be provided with notification appliances for the hearing impaired installed in accordance with NFPA 72 and which shall activate upon initiation of the fire alarm system or the smoke alarms.

**907.9.2 Audible alarms.** Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: 75 dBA in occupancies in Groups R and I-1; 90 dBA in mechanical equipment rooms and 60 dBA in other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 95 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

In Group I-2 occupancies, audible appliances placed in patient areas shall be only chimes or similar sounding devices for alerting staff.

**Exception:** Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in *patient* areas of Group I-2 occupancies.

**[F] 907.9.2.1 Audible alarm signal.** The audible signal shall be the standard fire alarm evacuation signal, ANSI S3.41 Audible Emergency Evacuation Signal, "three pulse temporal pattern", as described in NFPA 72.

**Exception:** The use of the existing evacuation signaling scheme shall be permitted where approved by the enforcing agency.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE <sup>2</sup>CHAPTER 10 – MEANS OF EGRESS

Adopting Agency		B S C	S F M		Н	CD	DS	A	C	SH	PD		C S A	D H S	A G R	W	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4							
Adopt entire Chapter as amend sections listed below)	ded (amended																		
Adopt only those sections that	are listed below						Х												
Chapter / Section	Codes																		
Accessible Means of Egress	IBC						Х												
Area of Refuge	IBC						Х												
Exit	IBC						Х												
Guard (or Guardrail)	CA						Х												
Handrail	IBC						Х												
Public Way	IBC						Х												
Stair	IBC						Х												
Stairway	IBC						Х												_
<u>1003.1</u>	CA						<u>x</u>												_
1003.3.4	CA						X												
1003.5 Exc 1, 2, & 3 only	<u>CA</u>						X												
1007.1	CA						X												
1007.2	CA						Х												
1007.2.1	IBC						<u>X</u>												
1007.3	CA						X												
1007.4	IBC						Х												
1007.5	CA						Х												
1007.5.1	IBC						X												
1007.6	CA						Х												
1007.6.1	CA						Х												
1007.6.2	IBC CA						Х												
1007.6.3	<del>CA</del> IBC						<u>X</u>												_
1007.6.3.1	CA						X												_
1007.6.4	CA						Х												_
1007.6.5	CA						Х												_
1007.7	CA						Х												_
1007.8	IBC <del>CA</del>						X												
1007.8.1	IBC						<u>X</u>												
1007.8.2	IBC						X												
1007.8.3	IBC						X												
1007.9	CA						X												
1008 1st paragraph only	CA						X												_
1008.1.1 Exc. 2, 7 & 8 only	<u>CA</u>						<u>X</u>												_
1008.1.6 Exc only	<u>CA</u>						X												_
1008.1.8.1	<u>CA</u>						<u>X</u>												_
1008.1.8.6	CA						X											$\vdash$	_
Items 4, 5 & 5.1 only							^												l

<sup>2</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, 2007 California Building Code.

Corrections are made in the Matrix Adoption Table, as shown in strikeout (etrikeout) and underline (underline).

1009 1 <sup>ST</sup> paragraph only	CA		Х					
1009.3 Exc 5 only	CA		<u>x</u>					
1009.10 last paragraph only	CA		Х					
1010 1st paragraph only	CA		Х					
1010.1 Exc 1 & 2 only	<u>CA</u>		<u>X</u>					
1010.6.5	CA		X					
1010.9 Exc 1 only	CA		X					
1011.3	CA		X					
1012 1st paragraph only	CA		X					
1013.1	IBC		X					
1013.2	<del>IBC</del> <u>CA</u>		X					
1013.3	CA		X					
1014.4 (last paragraph only)	CA		X					
1014.4.1 Exc only	CA		X					
<del>1017.4.1</del>	<del>CA</del>		×					
1020.1.6.2	CA		Х					

#### SECTION 1002 DEFINITIONS

#### 1002.1 Definitions.

**ACCESSIBLE MEANS OF EGRESS.** A continuous and unobstructed way of egress travel from any accessible point in a building or facility to a public way.

**AREA OF REFUGE.** An area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation.

**EXIT.** That portion of a means of egress system which is separated from other interior spaces of a building or structure by fire-resistance-rated construction and opening protectives as required to provide a protected path of egress travel between the exit access and the exit discharge. Exits include exterior exit doors at ground level, exit enclosures, exit passageways, exterior exit stairs, exterior exit ramps and horizontal exits.

**GUARD** [DSA-AC & HCD 1] or GUARDRAIL. A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

HANDRAIL. A horizontal or sloping rail intended for grasping by the hand for guidance or support.

**PUBLIC WAY.** A street, alley or other parcel of land open to the outside air leading to a street, that has been deeded, dedicated or otherwise permanently appropriated to the public for public use and which has a clear width and height of not less than 10 feet (3048 mm).

**STAIR.** A change in elevation, consisting of one or more risers.

**STAIRWAY.** One or more flights of stairs, either exterior or interior, with the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one level to another.

# SECTION 1003 GENERAL MEANS OF EGRESS

**1003.1 Applicability.** The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the means of egress system, in addition to those specific requirements for the exit access, the exit and the exit discharge detailed elsewhere in this chapter.

Exception: Exiting requirements for fixed guideway transit systems shall be as per Section 433.3 of the California Building Code.

[DSA-AC] In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 108.2.1.2 regulated by the Department of Housing and Community Development, or Section 109.1 regulated by the Division of the State Architect—Access Compliance, shall also comply with Chapter 11A or Chapter 11B, as applicable.

**1003.3.4 Clear width.** Protruding objects shall not reduce the minimum clear width of accessible routes as required in *Chapter 11A or Chapter 11B, Section 1133B.8.6.* 

#### 1003.5 Elevation change.

#### Exceptions:

- 1. A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2, R-3, S and U at exterior doors not required to be accessible by *Chapters 11A or 11B*.
- 2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapters 11A or 11B, provided that the risers and treads comply with Section 1009.3, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.
- 3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by *Chapter 11A or 11B*, provided that the risers and *treads comply with Section 1025.11 and the aisle is provided with a handrail complying with Section 1025.13.*

Any change in elevation in a corridor *or exit passageway* serving nonambulatory persons in Group I-2 *and Group I-2.1 occupancies* shall be by means of a ramp or sloped walkway.

# SECTION 1007 ACCESSIBLE MEANS OF EGRESS

**1007.1** Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required by Sections 1015.1 or 1019.1 from any accessible space, each accessible portion of the space shall be served by accessible means of egress in at least the same number as required by Section 1015.1 or 1019.1. In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings for persons with disabilities, shall also comply with the requirements of Chapters 11A or 11B, as applicable.

#### **Exceptions:**

- 1. Accessible means of egress are not required in alterations to existing buildings.
- 2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5 and Chapter 11A or 11B, as applicable.
- 3. In assembly spaces with sloped floors, one accessible means of egress is required from a space where the common path of travel of the accessible route for access to the wheelchair spaces meets the requirements in Section 1025.8 and Chapter 11A or 11B, as applicable.

**1007.2 Continuity and components.** Each required accessible means of egress shall be continuous to a public way and shall consist of one or more of the following components:

- 1. Accessible routes complying with *Chapter 11A, Sections 1110A.1 and 1120A, or Chapter 11B, Section 1114B.1.2, as applicable.*
- 2. Stairways within vertical exit enclosures complying with Sections 1007.3, 1020 and Chapter 11A, Section 1123A, or Chapter 11B, Section 1133B.4, as applicable.
- 3. Exterior exit stairways complying with Sections 1007.3, 1023 and Chapter 11A, Section 1115A, or Chapter 11B, Section 1133B.4, as applicable.

- 4. Elevators complying with Section 1007.4 and Chapter 11A, Section 1124A, or Chapter 11B, Section 1116B.1, as applicable.
- 5. Platform lifts complying with Section 1007.5 and Chapter 11A, Section 1124A, or Chapter 11B, Sections 1116B.2 and 1116B.3, as applicable.
- 6. Horizontal exits complying with Section 1022.
- 7. Ramps complying with Section 1010 and Chapter 11A, Sections 1114A and 1122A, or Chapter 11B, Section 1133B.5, as applicable.
- 8. Areas of refuge complying with Section 1007.6.

#### **Exceptions:**

- Where the exit discharge is not accessible, an exterior area for assisted rescue must be provided in accordance with Section 1007.8.
- Where the exit stairway is open to the exterior, the accessible means of egress shall include either an area of refuge in accordance with Section 1007.6 or an exterior area for assisted rescue in accordance with Section 1007.8.

**1007.2.1 Elevators required.** In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, at least one required accessible means of egress shall be an elevator complying with Section 1007.4.

#### **Exceptions:**

- 1. In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a horizontal exit and located at or above the level of exit discharge.
- In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a ramp conforming to the provisions of Section 1010.

**1007.3 Exit stairways.** In order to be considered part of an accessible means of egress, an exit stairway shall have a clear width of 48 inches (1219 mm) minimum between handrails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit. [DSA-AC] In addition, exit stairways shall comply with Chapter 11A, Sections 1115A and 1123A, or Chapter 11B, Section 1133B.4, as applicable.

#### Exceptions:

- Unenclosed exit stairways as permitted by Section 1020.1 are permitted to be considered part of an accessible means of egress.
- 2. The area of refuge is not required at unenclosed exit stairways as permitted by Section 1020.1 in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
- 3. The clear width of 48 inches (1219 mm) between handrails is not required at exit stairways in buildings or facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 4. The clear width of 48 inches (1219 mm) between handrails is not required for exit stairways accessed from a horizontal exit.
- **5.** Areas of refuge are not required at exit stairways serving open parking garages.

**1007.4 Elevators.** In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of Section 2.27 of ASME A17.1. Standby power shall be provided in accordance with Sections 2702 and 3003. The elevator shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

**Exception:** Elevators are not required to be accessed from an area of refuge or horizontal exit in open parking garages.

**1007.5 Platform lifts.** Platform (wheelchair) lifts shall not serve as part of an accessible means of egress, except where allowed as part of a required accessible route in *Chapter 11A*, *Section 1121A*, *or Chapter 11B*, *Sections 1116B.2.1 through 1116B.2.4*, as applicable. Standby power shall be provided in accordance with Section 2702.2.6 for platform lifts permitted to serve as part of a means of egress.

[DSA-AC] See Chapter 11B, Section 1116B.3 for additional accessible means of egress requirements at platform or special access lifts.

**1007.5.1 Openness.** Platform lifts on an accessible means of egress shall not be installed in a fully enclosed hoistway.

**1007.6** Areas of refuge. Every required area of refuge shall be accessible from the space it serves by an accessible means of egress. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1. Every required area of refuge shall have direct access to an enclosed stairway complying with Sections 1007.3 and 1020.1 or an elevator complying with Section 1007.4. Where an elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1020.1.7 for smokeproof enclosures except where the elevators are in an area of refuge formed by a horizontal exit or smoke barrier. [DSA-AC] Areas of refuge shall comply with the requirements of this code and shall adjoin an accessible route of travel complying with Section 1114B.1.2.

**1007.6.1 Size.** Each area of refuge shall be sized to accommodate *two* wheelchair spaces *that are not less than* 30 inches by 48 inches (762 mm by 1219 mm) *each. The total number of such 30-inch by 48-inch* (762 mm by 1219 mm) spaces per story shall be not less than one for every 200 persons of calculated occupant load served by the area of refuge. Such wheelchair spaces shall not reduce the required means of egress width. Access to any of the required wheelchair spaces in an area of refuge shall not be obstructed by more than one adjoining wheelchair space.

**Exception:** The enforcing agency may reduce the size of each required area of refuge to accommodate one wheelchair space that is not less than 30 inches by 48 inches (762 mm by 1219 mm) on floors where the occupant load is less than 200.

**1007.6.2 Separation.** Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 of the *California Building Code* or a horizontal exit complying with Section 1022. Each area of refuge shall be designed to minimize the intrusion of smoke.

**Exception:** Areas of refuge located within a vertical exit enclosure.

**1007.6.3 Two-way communication.** Areas of refuge shall be provided with a two-way communication system between the area of refuge and a central control point. If the central control point is not constantly attended, the area of refuge shall also have controlled access to a public telephone system. Location of the central control point shall be approved by the fire department. The two-way communication system shall include both audible and visible signals.

**1007.6.3.1** Visible communication method. [DSA-AC] A button complying with Section 1117B.6 in the area of refuge shall activate both a light in the area of refuge indicating that rescue has been requested and a light at the central control point indicating that rescue is being requested. A button at the central control point shall activate both a light at the central control point and a light in the area of refuge indicating that the request has been received.

**1007.6.4 Instructions.** In areas of refuge that have a two-way emergency communications system, instructions on the use of the area under emergency conditions shall be posted adjoining the communications system. The instructions shall include all of the following and shall comply with Section 1117B.5.1, Item 2.

- 1. Directions to find other means of egress.
- 2. Persons able to use the exit stairway do so as soon as possible, unless they are assisting others.
- 3. Information on planned availability of assistance in the use of stairs or supervised operation of elevators and how to summon such assistance.

4. Directions for use of the emergency communications system.

1007.6.5 Identification. Each door providing access to an area of refuge from an adjacent floor area shall be identified by a sign complying with Section 1117B.5.1, Item 2, stating: AREA OF REFUGE, and including the International Symbol of Accessibility. Where exit sign illumination is required by Section 1011.2, the area of refuge sign shall be illuminated. Additionally, tactile signage complying with Section 1117B.5.1, Item 1 shall be located at each door to an area of refuge.

1007.7 Signage. At exits and elevators serving a required accessible space but not providing an approved accessible means of egress, signage shall be installed indicating the location of accessible means of egress. [DSA-AC] Signs shall comply with Chapter 11A or Chapter 11B, Section 1117B.5.1, Items 2 and 3, as applicable.

1007.8 Exterior area for assisted rescue. The exterior area for assisted rescue must be open to the outside air and meet the requirements of Section 1007.6.1. Separation walls shall comply with the requirements of Section 704 for exterior walls. Where walls or openings are between the area for assisted rescue and the interior of the building, the building exterior walls within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall have a fireresistance rating of not less than 1 hour. Openings within such exterior walls shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour. This construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower.

- 1007.8.1 Openness. The exterior area for assisted rescue shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.
- 1007.8.2 Exterior exit stairway. Exterior exit stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.
- 1007.8.3 Identification. Exterior areas for assisted rescue shall have identification as required for area of refuge that complies with Section 1007.6.5.

1007.9 Alarms/emergency warning systems/accessibility. If emergency warning systems are required, they shall activate a means of warning the hearing impaired. Emergency warning systems as part of the fire-alarm system shall be designed and installed in accordance with NFPA 72, as amended in Chapter 35.

### **SECTION 1008** DOORS, GATES AND TURNSTILES

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect--Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.2, as applicable.

#### 1008.1.1 Size of doors.

#### **Exceptions:**

Other than those required to be accessible by Chapter 11B, door openings to resident sleeping units in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).

- In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be adaptable or accessible as specified in Chapter 11A or 11B, as applicable.
- Door openings required to be accessible within dwelling units shall have a minimum clear width as specified in Chapter 11A or 11B, as applicable.

#### 1008.1.6 Thresholds.

**Exception:** The threshold height shall be limited to 7.75 inches (197 mm) where the occupancy is Group R-2 or R-3; the door is an exterior door that is not a component of the required means of egress; the door, other than an exterior storm or screen door does not swing over the landing or step; and the doorway is not on an accessible route as required by *Chapter 11A or 11B* and is not part of an *adaptable or accessible dwelling unit*.

#### 1008.1.8 Door operations.

**1008.1.8.1 Hardware.** Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by *Chapter 11A or Chapter 11B* shall not require tight grasping, tight pinching or twisting of the wrist to operate.

**1008.1.8.6 Delayed egress locks.** Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 *and* an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 9 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit. *Delayed egress devices shall conform to all of the following:* 

- 1. The doors unlock upon actuation of the automatic sprinkler system or automatic *smoke* detection system.
- 2. The doors unlock upon loss of electrical power to any one of the following:
  - 2.1. The egress-control device itself.
  - 2.2. The smoke detection system.
  - 2.3. Means of egress illumination as required by Section 1006.
- 3. The door locks shall have the capability of being unlocked by a signal from a switch located in an approved location.
- 4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only. {SFM] The time delay established for each egress-control device shall not be field adjustable. For applications listed in Section 109.1 regulated by the Division of the State Architect--Access Compliance, see Chapter 11B, Section 1133B.2.5.

**Exception:** In facilities housing Alzheimer's or dementia clients, a delay of not more than 30 seconds is permitted.

- 5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: "KEEP PUSHING. THIS DOOR WILL OPEN IN 15 [30] SECONDS. ALARM WILL SOUND". Sign lettering shall be at least 1 inch (25 mm) in height and shall have a stroke of not less than 1/8 inch (3.2 mm).
  - 5.1. A tactile sign shall also be provided in Braille and raised characters, which complies with Section 1117B.5.1, Item 1.
- Emergency lighting shall be provided at the door.

- Actuation of the panic bar or other door-latching hardware shall activate an audible signal at the door.
- 8. The unlatching shall not require more than on operation.
- 9. Regardless of the means of deactivation, relocking of the egress-control device shall be by manual means only at the doors.

#### SECTION 1009 STAIRWAYS

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect--Access Compliance, shall also comply with Chapter 11A or Chapter 11B, Section 1133B.4, as applicable.

#### 1009.3 Stair treads and risers.

#### **Exceptions:**

1.

2.

3.

4.

 See the Section 3403.4 for the replacement of existing stairways. [HCD 1] See Chapter 34, Section 3403.1, Exception 2 for additions, alterations or repairs to existing buildings. [DSA-AC] For applications listed in Section 109.1 regulated by the Division of the State Architect-Access Compliance, see Chapter 11B, Section 1134B.

#### 1009.10 Handrails.

#### **Exceptions:**

1.

2.

3.

4.

5.

[DSA-AC] For applications listed in Section 1091 regulated by the Division of the State Architect--Access Compliance, see Chapter 11B, Section 1133B.4.1.

#### SECTION 1010 RAMPS

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect--Access Compliance, shall also comply with Chapter 11A or Chapter 11B, Section 1133B.5, as applicable.

#### 1010.1 Scope.

#### **Exceptions:**

- Other than ramps that are part of the accessible routes providing access in accordance with Chapter 11A or Chapter 11B, ramped aisles within assembly rooms or spaces shall conform with the provisions in Section 1025.11.
- 2. Curb ramps shall comply with Chapter 11A or 11B, Section 1127B.5, as applicable.

3.

**1010.6.5 Doorways.** Where doorways are located adjacent to a ramp landing, maneuvering clearances required for accessibility are permitted to overlap the required landing area as specified in Chapter 11A or Chapter 11B, Section 1133B.5.

1010.9 Edge protection. Edge protection complying with Section 1010.9.1 or 1010.9.2 shall be provided on each side of ramp runs and at each side of ramp landings. See Chapter 11A, Sections 1114A.7 and 1122A.6, for curb and wheel guide requirements.

#### Exceptions:

- Edge protection is not required on ramps that are not required to have handrails, provided they have flared sides that comply with the Chapter 11A or Chapter 11B, Section 1127B.5.
- 2.
- 3.

#### **SECTION 1011 EXIT SIGNS**

1011.3 Tactile exit signs. For the purposes of Section 1011.3, the term "tactile exit signs" shall mean those required signs that comply with Section 1117B.5.1, Item 1. Tactile exit signs shall be required at the following locations:

- 1. Each grade-level exterior exit door shall be identified by a tactile exit sign with the word, "EXIT."
- 2. Each exit door that leads directly to a grade-level exterior exit by means of a stairway or ramp shall be identified by a tactile exit sign with the following words as appropriate:
  - a. "EXIT STAIR DOWN"
  - b. "EXIT RAMP DOWN"
  - c. "EXIT STAIR UP"
  - d. "EXIT RAMP UP"
- 3. Each exit door that leads directly to a grade-level exterior exit by means of an exit enclosure that does not utilize a stair or ramp, or by means of an exit passageway, shall be identified by a tactile exit sign with the words, "EXIT ROUTE."
- 4. Each exit access door from an interior room or area that is required to have a visual exit sign, shall be identified by a tactile exit sign with the words, "EXIT ROUTE."
- 5. Each exit door through a horizontal exit shall be identified by a tactile exit sign with the words "TO EXIT."

#### SECTION 1012 **HANDRAILS**

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect--Access Compliance, shall also comply with Chapter 11A or Chapter 11B, Section 1133B.4.1, as applicable.

#### **SECTION 1013 GUARDS**

1013.1 Where required. Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7. Where glass is used to provide a guard or as a portion of the guard system, the guard shall also comply with Section 2407. Guards shall also be located along glazed sides of stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below where the glazing provided does not meet the strength and attachment requirements in Section 1607.7.

**Exception:** Guards are not required for the following locations:

- 1. On the loading side of loading docks or piers.
- On the audience side of stages and raised platforms, including steps leading up to the stage and raised platforms.
- On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
- 4. At vertical openings in the performance area of stages and platforms.
- At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
- 6. Along vehicle service pits not accessible to the public.
- 7. In assembly seating where guards in accordance with Section 1025.14 are permitted and provided.

**1013.2 Height.** Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.

#### **Exceptions:**

- 1. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, guards whose top rail also serves as a handrail shall have a height not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from the leading edge of the stair tread nosing.
- 2. The height in assembly seating areas shall be in accordance with Section 1025.14.

**1013.3 Opening limitations.** Open guards shall have balusters or ornamental patterns such that a 4-inch diameter (102 mm) sphere cannot pass through any opening.

#### **Exceptions:**

- 1. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of 6 inches (152 mm) in diameter cannot pass through the opening.
- 2. At elevated walking surfaces for access to and use of electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
- 3. In areas that are not open to the public within occupancies in Group I-3, F, H or S, balusters, horizontal intermediate rails or other construction shall not permit a sphere with a diameter of 21 inches (533 mm) to pass through any opening.
- 4. In assembly seating areas, guards at the end of aisles where they terminate at a fascia of boxes, balconies and galleries shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.
- 5. Within individual dwelling units and sleeping units in Group R-2 and R-3 occupancies, openings for required guards on the sides of stair treads shall not allow a sphere of 4.375 inches (111 mm) to pass through.

### SECTION 1014 EXIT ACCESS

#### 1014.4 Aisles.

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109.1 regulated by the Division of the State Architect--Access Compliance, shall also comply with Chapter 11A or Chapter 11B, Section 1133B.6, as applicable.

### 1014.4.1 Aisles in Groups B and M.

Exception: Nonpublic aisles serving less than 50 people and not required to be accessible by Chapter 11B (see Sections 1103B.1 Exception 2, and 1123B.2 exception) need not exceed 28 inches (711 mm) in width.

#### SECTION 1020 VERTICAL EXIT ENCLOSURES

1020.1 Enclosures required.

1020.1.6 Stairway floor number signs.

**1020.1.6.1 Sign details. [SFM]** The provisions of this section shall apply to signs required by Section 1020.1.6.

1020.1.6.1.1 Size. Signs shall be a minimum 12 inches (305 mm) by 12 inches (305 mm).

**1020.1.6.1.2 Stairway location.** The stairway location, such as STAIR NO. 1 or WEST STAIR, shall be placed at the top of the sign in 1-inch high (25 mm) block lettering with ¼-inch (6.4 mm) strokes.

**1020.1.6.1.3 Upper terminus**. The stairway's upper terminus, such as ROOF ACCESS or NO ROOF ACCESS, shall be placed under the stairway identification in 1-inch-high (25 mm) block lettering with ¼-inch (6.4 mm) strokes.

**1020.1.6.1.4 Floor level numbering.** The floor level number shall be placed in the middle of the sign in 5-inch-high (127 mm) lettering with ¾-inch (19 mm) strokes. The mezzanine levels shall have the letter "M" preceding the floor level. Basement levels shall have the letter "B" preceding the floor number.

**1020.1.6.1.5 Lower terminus.** The lower and upper terminus of the stairway shall be placed at the bottom of the sign in 1-inch-high (25 mm) block lettering with ¼-inch (6.4 mm) stokes.

[DSA-AC & SFM] 1020.1.6.2 Tactile floor designation signs in stairways. When accessibility is required, tactile floor designation signs that comply with 1117B.5.1, Item 1, shall be located at the landing of each floor level, placed adjacent to the door on the latch side, in all enclosed stairways in buildings two or more stories in height to identify the floor level. At the exit discharge level, the sign shall include a raised five-pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.

Chapter 11

**RESERVED** 

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 11A – HOUSING ACCESSIBILITY

Adopting Agency	, , ,		S F M		Н	CD	D:	SA		OSF	HPD	)	C S A	D H S	A G R	D И R	C E C	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
						Χ														
Adopt entire Chapter as Amended (amended sections listed below)							Х													
Adopt only those sections tha	t are listed below		X																	
Chapter / Section	Codes																			
1102A.3.1, Exc.	CA						†													
1104A.2, Exc.	CA						†													
1118A	CA		Χ																	

The state agency does not adopt sections identified with the following symbol: †

### Division I – APPLICATION, GENERAL PROVISIONS, AND DEFINITIONS

#### Division I Table of Contents

Section 1101A Application
Section 1102A Building Accessibility
Section 1103A Design and Construction
Section 1104A Group R Occupancies
Section 1106A Section 1106A Site and Building Characteristics
Section 1107A Definitions

SECTION 1101A

# **1101A.1 Scope.** The application and authority of this chapter are identified and referenced in Sections 108.2.1.2 and 1102A for the Department of Housing and Community Development. Applicable sections are identified in the Matrix Adoption Tables of this code under the abbreviation HCD 1-AC. The provisions of this chapter shall apply to the following:

**APPLICATION** 

- 1. All newly-constructed covered multifamily dwellings.
- New common use spaces serving existing covered multifamily dwellings.
- 3. Additions to existing buildings, where the addition alone meets the definition of a covered multifamily dwelling.
- 4. Common-use areas serving covered multifamily dwellings.

These building standards generally do not apply to public accommodations such as hotels and motels. Public use areas, public accommodations, and housing which is publicly funded as defined in Chapter 2, Chapter 11A, and Chapter 11B of this code are subject to provisions of the Division of the State Architect (DSA—AC) and are referenced in Section 109.1.1.

### SECTION 1102A BUILDING ACCESSIBILITY

**1102A.1** Where required. Buildings or portions of buildings and facilities within the scope of this chapter shall be accessible to persons with disabilities. Each building on a building site shall be considered separately when determining the requirements contained in this chapter, except when calculating the number of units which must comply with Section 1102A.3.1. Dwelling units within a single structure separated by firewalls do not constitute separate buildings.

Newly-constructed covered multifamily dwellings as defined in this chapter, include, but are not limited to, the following:

- Apartment buildings with 3 or more dwelling units including timeshare apartments not considered a place of public accommodation or transient lodging as defined in Health and Safety Code Section 19955 (a) and Chapter 2 of the California Building Code.
- Condominiums with 4 or more dwelling units including timeshare condominiums not considered a place of public accommodation or transient lodging as defined in Health and Safety Code Section 19955 (a) and Chapter 2 of the California Building Code.
- 3. Lodging houses, as defined in Chapter 2 of the California Building Code, used as a residence with more than 3 but not more than 5 guest rooms.
- 4. Congregate residences, as defined in Chapter 2 of the California Building Code.
- 5. Dwellings with 3 or more efficiency units, as defined in Chapter 2 of this code, or Section 17958.1 of the California Health and Safety Code.
- 6. Shelters for homeless persons, not otherwise subject to the disabled access provisions of the Division of the State Architect—Access Compliance (DSA—AC).
- 7. Dormitories, as defined in Chapter 2 of this code, with 3 or more guest rooms as defined in Chapter 2 of the California Building Code.
- 8. Timeshare dwellings with 3 or more units, not considered a place of public accommodations or transient lodging as defined in Health and Safety Code Section 19955 (a) and Chapter 2 of the California Building Code.
- 9. Other Group R Occupancies in covered multifamily dwellings which are regulated by the Office of the State Fire Marshal. See Section 111.
- 10. Housing which is publicly funded as defined in Chapter 2 of this code is subject to provisions of the Division of the State Architect (DSA—AC). See Section 1111.B.5.

**1102A.2 Existing buildings.** The building standards contained in this chapter do not apply to the alteration, repair, rehabilitation or maintenance of Group R Occupancies constructed for first occupancy prior to March 13, 1991. Housing which is publicly funded as defined in Chapter 2 of this code is subject to provisions of the Division of the State Architect (DSA—AC). See Section 1111.B.5.

Covered multifamily dwellings shall be maintained in compliance with the accessibility standards in effect at the time of construction. Apartments constructed prior to March 13, 1991 shall be maintained in compliance with the accessibility standards in effect at the time of construction.

Additions to Group R occupancies shall be subject to the requirements of this chapter, provided the addition, when considered alone, meets the definition of a covered multifamily dwelling, as defined in this chapter. New common use spaces serving existing covered multifamily dwellings shall be subject to the requirements of this chapter.

**Note:** For all existing public use areas, public accommodations, and housing which is publicly funded, see Chapter 11B, Division IV, Section 1134B for provisions of the Division of the State Architect — Access Compliance (DSA—AC).

#### 1102A.3 Multistory dwellings.

**1102A.3.1 Multistory apartment or condominium dwellings in buildings with no elevator**. This section shall apply to multistory dwelling units on the ground floor of buildings without elevators for which an application for a construction permit is submitted on or after July 1, 2005.

**Exception:** Carriage units as defined in Section 1107A.3-C and regulated only by the Department of Housing and Community Development as referenced in Section 108.2.1.2

At least 10 percent but not less than one of the multistory dwellings in apartment buildings with 3 or more dwelling units and/or condominiums with 4 or more dwelling units shall comply with the following:

- 1. The primary entry to the dwelling unit shall be on an accessible route unless exempted by site impracticality tests in Section 1150A.
- 2. At least one powder room or bathroom shall be located on the primary entry level, served by an accessible route and shall comply with the provisions in Division IV.
- 3. All rooms or spaces located on the primary entry level shall be served by an accessible route and shall comply with the provisions in Division IV. Rooms and spaces located on the primary entry level and subject to this chapter may include but are not limited to kitchens, powder rooms, bathrooms, living rooms, bedrooms, or hallways.
- 4. Common use areas covered by this section shall be accessible as required by this chapter. Public use areas as defined in Chapter 2, Chapter 11A, and Chapter 11B of this code are subject to provisions of the Division of the State Architect (DSA—AC) and are referenced in Section 109.1.1.

The minimum number of multifamily dwelling units which must comply with this section shall be calculated using the total number of all multistory dwelling units in buildings on a site which are subject to this section. Any fraction thereof shall be rounded to next highest whole number.

**1102A.3.2 Multistory dwelling units in buildings with one or more elevators.** Multistory dwelling units, i.e., townhouse and condominium-type construction, contained in buildings with elevators shall comply with this section. For multistory dwelling units in buildings with elevators, the story of the unit that is served by the building elevator is considered a ground floor and the primary entry floor to the unit.

- 1. All rooms and spaces located on the primary entry floor shall comply with the following: At least 1 powder room or bathroom shall be located on the primary entry level.
- 2. All rooms or spaces located on the primary entry level shall be served by an accessible route and shall comply with Division IV.

1102A.4 Participation areas. Access shall be provided to elements listed in Section 1104B.4.3, "Participation areas".

**1102A.5 Swimming pools.** Swimming pools and spas required to be accessible shall comply with the provisions of Section 1141A.

**1102A.6 Temporary restrictions.** During periods of partial or restricted use of a building or facility, the entrances used for primary access shall be accessible to and usable by persons with disabilities.

# SECTION 1103A DESIGN AND CONSTRUCTION

#### 1103A.1 General.

**1103A.1.1** When buildings are required to be accessible, they shall be designed and constructed as provided in this chapter.

**Note:** Public use areas, public accommodations, and housing which is publicly funded as defined in Chapter 2, Chapter 11A, and Chapter 11B of this code are subject to provisions of the Division of the State Architect (DSA—AC) and are referenced in Section 109.1.1.

#### SECTION 1104A GROUP R OCCUPANCIES

**1104A.1 General.** All ground-floor dwelling units in nonelevator buildings shall be adaptable and on an accessible route, unless an accessible route is not required as determined by site impracticality provisions in Section 1150A. For buildings with elevators, see Section 1106A.

Multistory dwellings units shall comply with Section 1102A.3.

**1104A.2 Ground floors above grade.** Where the first floor containing dwelling units in a building is above grade, all units on that floor shall be served by an accessible route. This floor will be considered a ground floor and all dwelling units are considered covered multifamily dwelling units.

**Exception:** Carriage units as defined in Section 1107A.3-C and regulated only by the Department of Housing and Community Development as referenced in Section 108.2.1.2.

Multistory dwellings units shall comply with Section 1102A.3.

#### SECTION 1105A GROUP U OCCUPANCIES

**1105A.1 General.** Group U, Division 1, private garages which are accessory to covered multifamily dwelling units, shall be accessible as required in Section 1109A. Group U, Division 1, private garages include individual garages and multiple individual garages grouped together.

#### SECTION 1106A SITE AND BUILDING CHARACTERISTICS

- 1106A.1 General. Covered multifamily dwellings with elevators shall be designed and constructed to provide at least one accessible entrance on an accessible route, regardless of terrain or unusual characteristics of the site. Covered multifamily dwellings without elevators shall be designed and constructed to provide at least one accessible entrance on an accessible route unless terrain or unusual characteristics of the site prevent an accessible route based on the conditions listed below:
  - Accessible entrance. Regardless of site considerations described in Section 1150A, an accessible entrance on an accessible route is required when there is an elevator connecting the parking area with the dwelling units on a ground floor. (In this case, those dwelling units on the ground floor served by an elevator, and at least one of each type of public- and common-use areas, would be subject to these requirements.)

2. Elevator building. When a building elevator or elevators are provided as a means of access to dwelling units other than dwelling units on a ground floor (see Section 1104A.2), the building is an elevator building. All dwelling units become covered multifamily dwellings in that building. The elevator in that building must provide accessibility to all dwelling units in the building, regardless of the slope of the natural terrain. For multistory dwelling units in buildings with one or more elevators, see Section 1102A.3.2.

**Note:** Where a building elevator is provided only as means of creating an accessible route to covered multifamily dwelling units on a ground floor, the building is not considered to be an elevator building, only dwelling units located on the ground floor shall be required to comply with this chapter.

3. **Elevated walkway.** When an elevated walkway is planned between a building entrance and a vehicular or pedestrian arrival point, and the planned walkway has a slope no greater than 10 percent (1 unit vertical in 10 units horizontal), the floor being served by the elevated walkway becomes a ground floor and accessibility to all dwellings on that ground floor is required.

**Note**: Since the planned walkway meets the 10 percent slope criterion, it is required to provide an accessible route to the entrance, and the slope of the walkway must be reduced to 1 unit vertical in 12 units horizontal (8.33 percent slope) maximum.

**1106A.2 Site impracticality.** For tests to determine site impracticality due to terrain considerations in non-elevator buildings, see Section 1150A.

#### SECTION 1107A DEFINITIONS

#### 1107A.1-A

**ACCESSIBLE** for covered multifamily dwellings is the public- or common-use areas of the building that can be approached, entered and used by persons with disabilities.

**ACCESSIBLE ROUTE** is a continuous and unobstructed path connecting all accessible elements and spaces in a building or within a site that can be negotiated by a person with a disability using a wheelchair, and that is also safe for and usable by persons with other disabilities. Interior accessible routes may include corridors, hallways, floors, ramps, elevators, and lifts. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.

**ACCESSIBILITY** is the combination of various elements in a building or area which allows access, circulation and the full use of the building and facilities by persons with disabilities.

**ADAPTABLE DWELLING UNIT** is an accessible dwelling unit within a covered multifamily building as designed with elements and spaces allowing the dwelling unit to be adapted or adjusted to accommodate the user. See Division IV.

ASSISTIVE DEVICE is an aid, tool or instrument used by persons with disabilities to assist in activities of daily living.

**AUTOMATIC DOOR** is a door equipped with a power-operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat or manual switch.

#### 1107A.2-B

**BATHROOM** is, for the purposes of this chapter, a room which includes a water closet (toilet), lavatory (sink), and/or a bathtub and/or a shower. It does not include single-fixture facilities or those with only a water closet and lavatory. It does include a compartmented bathroom. A compartmented bathroom is one in which the fixtures are distributed among interconnected rooms. A compartmented bathroom is considered a single unit and is subject to the requirements of this chapter.

**BUILDING ENTRANCE ON AN ACCESSIBLE ROUTE** is an accessible entrance to a building that is connected by an accessible route to public transportation stops, to parking or passenger loading zones, or to public streets or sidewalks, if available.

#### 1107A.3-C

**CARRIAGE UNIT** is a dwelling unit with living space on one or more floors immediately above a Group U, Division 1, private garage or garages. The footprint of the garage or garages is used as the footprint for the remaining floor or floors of the units above and the garage level contains no habitable space.

Note: Dwelling units located over a common garage shall not be considered carriage units.

**COMMON-USE AREAS** are private use areas within multifamily residential facilities where the use of these areas is limited exclusively to owners, residents, and their guests. The areas may be defined as rooms or spaces or elements inside or outside of a building.

**COVERED MULTIFAMILY DWELLINGS** are dwelling units in buildings consisting of 3 or more dwelling units or 4 or more condominium units. Covered multifamily dwellings include dwelling units listed in Section 1102A.1. Dwelling units within a single structure separated by firewalls do not constitute separate buildings.

**Note:** For buildings or complexes containing publicly funded dwelling units, see Chapter 11B, Section 1111B.5 for provisions of the Division of the State Architect — Access Compliance (DSA—AC).

CROSS SLOPE is the slope that is perpendicular to the direction of travel.

**CURB CUT** is an interruption of a curb at a pedestrian way, which separates surfaces that are substantially at the same elevation.

**CURB RAMP** is a sloping pedestrian way, intended for pedestrian traffic, which provides access between a walk or sidewalk and a surface located above or below an adjacent curb face.

#### 1107A.4-D

**DETECTABLE WARNING** is a standardized surface or feature built into or applied to walking surfaces or other elements to warn visually impaired persons of hazards in the path of travel. Only approved DSA/AC detectable warning products and directional surfaces shall be installed as provided in the CCR, Title 24, Part 1 Articles 2, 3, and 4. Refer to CCR, Title 24, Part 12, Chapter 12-11A and B for building and facilities access specifications for product approval for detectable warning products and directional surfaces.

**Note:** Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect - Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**DWELLING UNIT** is a single unit of residence for a family of one or more persons. Examples of dwelling units covered by this chapter include condominiums, an apartment unit within an apartment building, and other types of dwellings in which sleeping accommodations are provided but toileting or cooking facilities are shared by occupants of more than one room or portion of the dwelling. Examples of the latter include dormitory rooms and sleeping accommodations in shelters intended for occupancy as residences for homeless persons.

#### 1107A.5-E

**EQUIVALENT FACILITATION** is an alternate means of complying with the literal requirements of these standards and specifications that provides access consistent with the purpose of these standards and specifications.

#### Note:

- 1. See Section 108.1, Purpose.
- 2. In determining equivalent facilitation, consideration shall be given to means that provide for the maximum independence of persons with disabilities while presenting the least risk of harm, injury or other hazard to such persons or others.

1107A.6-F

**FACILITY (or FACILITIES)** is a building, structure, room, site, complex or any portion thereof, that is built, altered, improved or developed to serve a particular purpose.

1107A.7-G

GRAB BAR is a bar for the purpose of being grasped by the hand for support.

**GROUND FLOOR** is the floor of a building with a building entrance on an accessible route. A building may have one or more ground floors.

1107A.8-H (No definitions)

1107A.9-I

INDEPENDENT ENTITY. See Chapter 2, Section 202.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY** is that symbol adopted by Rehabilitation International's 11th World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities. See Chapter 11A, Figure 11A-1A.

1107A.10-J (No definitions)

1107A.11-K

**KICK PLATE** is an abrasion-resistant plate affixed to the bottom portion of a door to prevent a trap condition and protect its surface.

1107A.12-L

**LEVEL AREA** is a specified surface that does not have a slope in any direction exceeding ¼ inch (6.4 mm) in 1 foot (305 mm) from the horizontal (2.083-percent gradient).

LIFT, SPECIAL ACCESS. See "Special access lift."

1107A.13-M

MARKED CROSSING is a crosswalk or other identified marked path intended for pedestrian use in crossing a vehicular way.

**MULTISTORY DWELLING UNIT** is a dwelling unit with finished living space located on one floor and the floor or floors immediately above or below it.

1107A.14-N

**NEWLY CONSTRUCTED** is a building that has never before been used or occupied for any purpose.

NOSE, NOSING is that portion of a tread projecting beyond the face of the riser immediately below.

1107A.15-O

**OPEN RISER** is the airspace between a tread projecting beyond the face of the riser immediately below.

1107A.16-P

PASSAGE DOOR is a door other than an exit door through which persons may traverse.

**PEDESTRIAN** is an individual who moves within walking areas with or without the use of walking-assistive devices such as crutches, leg braces, wheelchairs, etc.

**PEDESTRIAN RAMP** is a sloping accessible route intended for pedestrian traffic and is differentiated from a curb ramp.

**PEDESTRIAN WAY** is a route by which a pedestrian may pass.

**PERSONS WITH DISABILITIES**, for purposes of this chapter, "persons with disabilities" includes, but is not limited to, any physical or mental disability as defined in Government Code Section 12926.

**POWDER ROOM** is a room containing a water closet (toilet) and lavatory (sink), and which is not defined as a bathroom in Section 1107A.2-B.

**PRIMARY ENTRY** is the principal entrance through which most people enter the building, as designated by the building official.

PRIMARY ENTRY LEVEL is the floor or level of the building on which the primary entry is located.

PUBLIC ACCOMMODATION. See Chapter 2, Section 217-P.

**PUBLIC USE AREAS** means interior or exterior rooms or spaces of a building that are made available to the general public and does not include Common Use Areas as defined in Section 1107A.3-C. Public Use Areas may be provided at a building that is privately or publicly owned.

1107A.17-Q (No definitions)

1107A.18-R

RAMP. See "Pedestrian ramp," Section 1107A.16-P.

RISER is the vertical distance from the top of a tread to the top of the next higher tread.

1107A.19-S

SIDEWALK. See "Sidewalk," Chapter 2, Section 220-S.

**SLEEPING ACCOMMODATIONS** are rooms in which people may sleep; for example, dormitory and hotel or motel guest rooms or suites.

**SLOPE** is the relative steepness of the land between two points and is calculated as follows:

The horizontal distance and elevation change between the two points (e.g., an entrance and a passenger loading zone). The difference in elevation is divided by the distance and the resulting fraction is multiplied by 100 to obtain the percentage of slope.

For example: if a principal entrance is 10 feet (3048 mm) from a passenger loading zone, and the principal entrance is raised 1 foot (305 mm) higher than the passenger loading zone, then the slope is  $1/10 \times 100 = 10$  percent.

**SPECIAL ACCESS LIFT** is a hoisting and lowering mechanism equipped with a car or platform, or support which serves two landings of a building or structure and is designed to carry a passenger or passengers and/or luggage or other material a vertical distance as may be allowed by Section 1124A.11.

1107A.20-T

**TOEBOARD** is a vertical barrier erected along the open edges of floor openings or floor holes, platforms and runways.

TOWNHOUSE is a multistory dwelling unit.

**TRANSIENT LODGING** is a building, facility, or portion thereof, available to the public as an inn, hotel, motel, timeshare, or place where one or more dwelling units or sleeping accommodations are provided for transient guests, excluding inpatient medical care facilities and lodging houses with 5 or less guest rooms. Transient lodging may include but is not limited to, resorts, group homes, and dormitories.

TREAD is the horizontal member of a step.

TREAD DEPTH is the horizontal distance from front to back of tread, including nosing when used.

TREAD RUN is the horizontal distance from the leading edge of a tread to the leading edge of an adjacent tread.

**1107A.21-U** (No definitions)

1107A.22-V

**VEHICULAR OR PEDESTRIAN ARRIVAL POINTS** are public or resident parking areas, public transportation stops passenger loading zones, and public streets or sidewalks.

1107A.23-W

**WALK** is a surfaced pedestrian way not located contiguous to a street used by the public. (See Section 220-S definition for "Sidewalk.")

WHEELCHAIR. See "Wheelchair," Chapter 2, Section 202.

**1107A.24-X** (No definitions)

1107A.24-Y (No definitions)

#### Division II - EXTERIOR FACILITIES

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# SECTION 1108A GENERAL REQUIREMENTS FOR ACCESSIBLE PARKING AND EXTERIOR ROUTES OF TRAVEL

#### Notes:

- 1. In addition to provisions of this division, exterior routes of travel that provide access to, or egress from, buildings for persons with disabilities shall also comply with Chapter 10.
- 2. Public use areas, public accommodations, and housing which is publicly funded as defined in Chapter 2, Chapter 11A, and Chapter 11B of this code are subject to provisions of the Division of the State Architect (DSA-AC) and are referenced in Section 109.1.1.

#### SECTION 1109A PARKING FACILITIES

**1109A.1 Accessible parking required**. Each parking facility provided for covered multifamily dwellings and facilities (e.g., swimming pools, club houses, recreation areas, and laundry rooms) that serve covered multifamily dwellings shall provide accessible parking as required by this section.

1109A.2 Parking facilities. Parking facilities shall include, but not be limited to, the following:

- Garages.
- 2. Private garages. (See Section 1105A for the application of building standards for accessibility).
- 3. Carports.
- 4. Off-street parking (parking lots/spaces).

**1109A.2.1** Private garages. Group U, Division 1, private garages which are accessory to covered multifamily dwelling units, shall be accessible as required in Section 1109A. Group U, Division 1, private garages include individual garages and multiple individual garages grouped together.

**Exception:** A private garage attached to and which directly serves a single covered multifamily dwelling unit is an accessible garage if a person with a disability can exit the dwelling unit's accessible entry door by an accessible route and enter the garage from the driveway. The provisions in Section 1109A shall not apply.

**1109A.3 Required accessible parking spaces.** Accessible parking spaces shall be provided at a minimum rate of 2 percent of the covered multifamily dwelling units. At least one space of each type of parking facility shall be made accessible even if the total number exceeds 2 percent. When assigned parking is provided, signage as required by Section 1109A.8.8 shall not be required.

**1109A.4** Assigned accessible parking spaces. When assigned parking spaces are provided for a resident or a group of residents, at least 2 percent of the assigned parking spaces serving covered multifamily dwelling units shall be accessible in each type of parking facility. At least one space of each type of parking facility shall be made accessible even if the total number exceeds 2 percent. When assigned parking is provided, signage as required by Section 1109A.8.8 shall not be required.

1109A.5 Unassigned and visitor parking spaces. When parking is provided for covered multifamily dwellings and is not assigned to a resident or a group of residents at least 5 percent of the parking spaces shall be accessible and provide access to grade-level entrances of covered multifamily dwellings and facilities (e.g., swimming pools, club houses, recreation areas, and laundry rooms) that serve covered multifamily dwellings. Accessible parking spaces shall be provided with signage as required by Section 1109A.8.8. Such signage shall not be blocked from view by a vehicle parked in the space.

**1109A.6 Requests for accessible parking spaces.** When assigned parking is provided, designated accessible parking for the dwelling unit shall be provided on request of residents with disabilities on the same terms and with the full range of choices (e.g., off-street parking, carport or garage) that are available for other residents.

**1109A.7 Location of accessible parking spaces.** The location of accessible parking spaces shall comply with the following:

- Accessible parking spaces shall be located on the shortest possible accessible route to an accessible building, or covered multifamily dwelling unit entrance. All van accessible spaces may be grouped on one level of a parking facility.
- 2. When parking facilities are located adjacent to a building with multiple accessible entrances, accessible parking spaces shall be dispersed and located near the accessible building entrances.
- 3. When practical, the accessible route shall not cross lanes for vehicular traffic. When crossing vehicle traffic lanes is necessary, the accessible route shall be designated and marked as a crosswalk.
- 4. Parking facilities that do not serve a particular building shall have accessible parking spaces located on the shortest possible accessible route to an accessible pedestrian entrance of the parking facility.
- 5. Accessible parking spaces shall be located so that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own.

**Exception**: When the enforcement agency determines that compliance with this section or providing equivalent facilitation would create an unreasonable hardship, parking spaces may be provided which would require a person with physical disabilities to wheel or walk behind other than accessible parking spaces.

**1109A.8 Design and construction.** Accessible parking required by this section shall be designed and constructed in accordance with Section 1109A.

**1109A.8.1 Vertical clearances.** Where required to be accessible, all entrances into, and vertical clearances within parking facilities shall have a minimum vertical clearance of 8 feet 2 inches (2489 mm) from the floor to the lowest projection from the ceiling.

1109A.8.2 Arrangement of parking spaces. Parking spaces shall be arranged to comply with the following:

- 1. In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways.
- 2. Ramps, including curb ramps, shall not encroach into any accessible parking space or the adjacent loading and unloading access aisle.

**1109A.8.3 Slope of accessible parking spaces.** Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed ¼ inch (6.35 mm) per foot (2.083-percent gradient) in any direction.

**1109A.8.4** Accessible parking space size. Accessible parking spaces shall comply with Sections 1109A8.5 and 1109A8.6.

**1109A.8.5** Accessible single parking space. Where accessible single spaces are provided, they shall be constructed in accordance with the following:

- 1. Single spaces shall be 14 feet (4267 mm) wide and lined to provide a 9 foot (2743 mm) wide parking area and a 5 foot (1524 mm) wide loading and unloading access aisle on the passenger side of the vehicle (see Figure 11A-2B) with the vehicle parked in the forward position.
- 2. When more than one space is provided, two 9 foot (2743 mm) wide parking spaces may be lined on each side of a 5 foot (1524 mm) wide loading and unloading access aisle (see Figure 11A-2A, and 11A-2C).
- The minimum length of each parking space shall be 18 feet (5486 mm).
- 4. The words "NO PARKING" shall be painted on the ground within each 5 foot (1524 mm) wide loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (305 mm) high and located so that it is visible to traffic enforcement officials (see Figures 11A-2A, 11A-2B, and 11A-2C).

**1109A.8.6 Van accessible parking space.** One in every eight accessible spaces, but not less than one, shall be van accessible and shall be constructed in accordance with the following:

- 1. Each space shall be served by a loading and unloading access aisle at least 8 feet (2438 mm) wide, placed on the passenger side with the vehicle parked in the forward position.
- 2. The minimum length of each space shall be 18 feet (5486 mm).
- 3. Each space shall be designated "van accessible" as required by Section 1109A.8.8.
- 4. All van accessible spaces may be grouped on one level of a parking facility.
- 5. The words "NO PARKING" shall be painted on the ground within each 8 foot (2438 mm) wide loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (305 mm) high and located so that it is visible to traffic enforcement officials.

Note: See Figures 11A-2A, 11A-2B, and 11A-2C.

**1109A.8.7 Adjacent parking.** Parking spaces adjacent to accessible parking spaces shall not be considered as loading and unloading access aisles.

1109A.8.8 Parking signage. Each accessible parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of the "International Symbol of Accessibility" in white on a dark blue background. The sign shall not be smaller than 70 square inches (4516 mm²) in area and, when in a path of travel, shall be posted at a minimum height of 80 inches (2032 mm) from the bottom of the sign to the parking space finished grade. Signs may also be centered on the wall at the interior end of the parking space at a minimum height of 36 inches (914 mm) from the parking space finished grade, ground or sidewalk. Spaces complying with Section 1109A.8.6 shall have an additional sign stating "Van-Accessible" mounted below the symbol of accessibility.

Note: When assigned resident parking is provided, signage is not required except for unassigned or visitor parking spaces.

An additional sign shall also be posted in a conspicuous place at each entrance to off-street parking facilities or immediately adjacent to and visible from each stall or space. The sign shall not be less than 17 inches (432 mm) by 22 inches (559 mm) in size with lettering not less than 1 inch (25.4 mm) in height, and shall clearly and conspicuously state the following:

"Unauthorized vehicles parked in designated	d accessible spaces not	t displaying distinguis.	hing placards or
license plates issued for persons with disabiliti	ies may be towed away	at owner's expense.	Towed vehicles
may be reclaimed at	or by telephoning		

Blank spaces are to be filled in with appropriate information as a permanent part of the sign.

In addition to the above requirements, the surface of each accessible parking space shall have a surface identification duplicating either of the following schemes:

- By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color the "International Symbol of Accessibility"; or,
- 2. By outlining the "International Symbol of Accessibility" in white on blue background. The "International Symbol of Accessibility" shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36 inches high by 36 inches wide (914 mm by 914 mm).

Note: See Figures 11A-2A, 11A-2B, and 11A-2C.

#### SECTION 1110A EXTERIOR ROUTES OF TRAVEL

**1110A.1 Exterior accessible route.** When a building or portion of a building is required to be accessible or adaptable, an accessible route shall be provided to all portions of the building, accessible building entrances and between the building and the public way. The accessible route shall be the most practical direct route and to the maximum extent feasible, coincide with the route for the general public and building residents.

Exterior accessible routes shall be provided as follows:

- 1. Where more than one route of travel is provided, all routes shall be accessible.
- 2. At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading and unloading zones, and public streets or sidewalks to the accessible building entrance they serve.
- 3. At least one accessible route shall connect accessible buildings, facilities, elements and spaces that are on the same site. Accessible routes shall be provided between accessible buildings and accessible site facilities when more than one building or facility is located on a site.
- 4. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces, elements, and covered multifamily dwelling units.
- 5. An accessible route shall connect at least one accessible entrance of each covered multifamily dwelling unit with exterior spaces and facilities that serve the dwelling unit.
- 6. Where elevators are provided for vertical access, all elevators shall be accessible. See Section 1124A.

**Note:** If the slope of the finished grade between covered multifamily dwellings and a public use or common use facility (including parking) exceeds 1 unit vertical in 12 units horizontal (8.33-percent slope), or where other physical barriers (natural or artificial) or legal restrictions, all of which are outside the control of the owner, prevent the installation of an accessible route, an acceptable alternative is to provide access by a vehicular route, provided:

- 1. There is accessible parking on an accessible route for at least 2 percent of the covered multifamily dwelling units, and
- 2. Necessary site provisions such as parking spaces and curb ramps are provided at the public use or common use facility.
- **1110A.2 Signs.** At every primary public entrance and at every major junction where the accessible route diverges from the circulation path along or leading to an accessible route, entrance or facility, there shall be a sign displaying the International Symbol of Accessibility." Signs shall indicate the direction to accessible building entrances and facilities and shall comply with the requirements found in Sections 1143A.2.
- 1110A.3 Flooring. If carpet or carpet tile is used in a common-use area or public-use area on a ground or floor surface, it shall have firm backing or no backing. The maximum pile height shall be ½inch (12.7 mm). Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 1111A requirements for changes in level.
  - 1110A.3.1 Recessed doormats. Recessed doormats shall be adequately anchored to prevent interference with wheelchair traffic.

### SECTION 1111A CHANGES IN LEVEL ON ACCESSIBLE ROUTES

- **1111A.1 Changes in level not exceeding** 1/2 **inch.** Abrupt changes in level along any accessible route shall not exceed ½ inch (12.7 mm). When changes in level do occur, they shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50-percent slope). Changes in level not exceeding ¼ inch (6.35 mm) may be vertical.
- **1111A.2 Changes greater than** 1/2 **inch.** Changes in level greater than ½ inch (12.7 mm) shall be made by means of a sloped surface not greater than 1 unit vertical in 20 units horizontal (5-percent slope), or a curb ramp, ramp, elevator or special access lift. Stairs shall not be part of an accessible route.

When stairs are located along or adjacent to an accessible route they shall comply with Section 1115A for exterior stairways.

### SECTION 1112A CURB RAMPS ON ACCESSIBLE ROUTES

- **1112A.1 General.** Curb ramps within the boundary of the site shall be constructed at each corner of street intersections and where a pedestrian way crosses a curb. The preferred and recommended location for curb ramps is in the center of the crosswalk of each street corner. Where it is necessary to locate a curb ramp in the center of the curb return, the street surfaces shall be marked to identify pedestrian crosswalks, and the lower end of the curb ramp shall terminate within such crosswalk areas. Curb ramps do not require handrails.
- **1112A.2 Obstructions.** Curb ramps shall be located or protected to prevent obstruction by parked cars. Built-up curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or the adjacent loading and unloading access aisle.
- 1112A.3 Width of curb ramps. Curb ramps shall be a minimum of 48 inches (1219 mm) in width.
- **1112A.4 Diagonal curb ramps.** If diagonal (or corner-type) curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow.

The bottom of diagonal curb ramps shall have a 48 inch (1219 mm) minimum clear space as shown in Figures 11A-3A through 11A-3M. If diagonal curb ramps are provided at marked crossings, the 48 inch (1219 mm) clear space shall be within the markings (see Figures 11A-3A through 11A-3M). If diagonal curb ramps have flared sides, they shall also have at least a 24-inch-long (610 mm) segment of straight curb located on each side of the curb ramp and within the marked crossing. See Figures 11A-3A through 11A-3M.

**1112A.5 Slope of curb ramps.** The slope of curb ramps shall not exceed 1 unit vertical to 12 units horizontal (8.33-percent slope) and shall lie, generally, in a single sloped plane. Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1 unit vertical to 20 units horizontal (5-percent slope) within 4 feet (1219 mm) of the top and bottom of the curb ramp.

If a curb ramp is located where pedestrians must walk across the ramp, then it shall have flared sides; the maximum slope of the flare shall be 1 unit vertical in 10 units horizontal (10-percent slope). Curb ramps with returned curbs may be used where pedestrians would not normally walk across the ramp. See Figures 11A-3A through 11A-3M.

- **1112A.6 Level landing.** A level landing 48 inches (1219 mm) deep shall be provided at the upper end of each curb ramp over its full width to permit safe egress from the ramp surface, or the slope of the fanned or flared sides of the curb ramp, shall not exceed 1 unit vertical to 12 units horizontal (8.33-percent slope).
- **1112A.7 Finish.** The surface of each curb ramp and its flared sides shall be stable, firm and slip-resistant and shall be of contrasting finish from that of the adjacent sidewalk.
- **1112A.8 Border.** All curb ramps shall have a grooved border 12 inches (305 mm) wide at the level surface of the sidewalk along the top and each side approximately 3/4 inch (19 mm) on center. All curb ramps constructed between the face of the curb and the street shall have a grooved border at the level surface of the sidewalk. See Figures 11A-3A through 11A-3K.
- 1112A.9 Detectable warnings. See Chapter 11B, Section 1127B.5, Item 7.

### SECTION 1113A WALKS AND SIDEWALKS ON AN ACCESSIBLE ROUTE

- **1113A.1 Width and continuous surface.** Walks and sidewalks subject to this chapter shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding ½ inch (12.7 mm). (See Section 1111A.3).
  - 1113A.1.1 Width. Walks and sidewalks shall be a minimum of 48 inches (1219 mm) in width, except that walks serving an individual dwelling unit in covered multifamily buildings may be reduced to 36 inches (914 mm) in clear width except at doors.
  - 1113A.1.2 Surfaces. Surfaces shall be slip-resistant as follows:
    - 1. Surfaces with a slope of less than 6 percent gradient shall be at least as slip-resistant as that described as a medium salted finish.
    - 2. Surfaces with a slope of 6 percent or greater gradient shall be slip-resistant.
  - **1113A.1.3 Surface cross slopes.** Surface cross slopes shall not exceed  $\frac{1}{4}$  inch (6.35 mm) per foot (2.083-percent slope) except when the enforcing agency finds that due to local conditions it creates an unreasonable hardship, the cross slope may be increased to a maximum of  $\frac{1}{2}$  inch (12.7 mm) per foot (4.2-percent slope) for distances not to exceed 20 feet (6096 mm).
- **1113A.2 Walks with continuous gradients.** All walks on an accessible route with continuous gradients shall have level areas at least 60 inches (1524 mm) in length at intervals of at least every 400 feet (122 m).
- **1113A.3 Five percent gradient.** When the slope in the direction of travel of any walk on an accessible route exceeds 1 unit vertical in 20 units horizontal (5-percent slope), it shall comply with the ramp provisions of Section 1114A.

1113A.4 Level areas. Walks on an accessible route shall be provided with a level area not less than 60 inches by 60 inches (1524 mm by 1524 mm) at a door or gate that swings toward the walk, and not less than 48 inches wide by 44 inches (1219 mm by 1118 mm) deep at a door or gate that swings away from the walk. See Section 1126A.3.2 for strike edge maneuvering space at doors or gates.

**1113A.5 Smooth surface.** The bottom 10 inches (254 mm) of all doors and/or gates except automatic and sliding doors or gates shall have a smooth, uninterrupted surface to allow the door or gate to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10 inch (254 mm) high smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition.

**1113A.6 Gratings.** Walks, sidewalks and pedestrian ways on an accessible route shall be free of gratings whenever possible. Gratings located in the surface of any of these areas, grid openings in gratings shall be limited to ½ inch (12.7 mm) in the direction of traffic flow.

#### Exceptions:

- 1. Where the enforcement agency determines that compliance with this section would create an unreasonable hardship, an exception may be granted when equivalent facilities are provided.
- 2. This section shall not apply in those conditions where, due to legal or physical constraints, all or portions of the site of the project will not allow compliance with these building standards or equivalent facilitation on all or portions of one site without creating an unreasonable hardship.

### SECTION 1114A EXTERIOR RAMPS AND LANDINGS ON ACCESSIBLE ROUTES

**1114A.1 Width.** The width of ramps shall be consistent with the requirements for exits in Chapter 10 of this code, but in no case shall the ramp width be less than the following:

- 1. Ramps serving accessible entrances to covered multifamily buildings where the ramp is the only exit discharge path and serves an occupant load of 300 or more shall have a minimum clear width of 60 inches (1524 mm).
- 2. Ramps serving accessible entrances in Group R occupancies with an occupant load of 10 or less may be 36 inches (914 mm) in clear width.
- 3. All other ramps shall have a minimum clear width of 48 inches (1219 mm).
- 4. Handrails, curbs, wheel guides and/or appurtenances shall not project into the required clear width of a ramp.

Note: See Section 1114A.6.2.4 for handrail projections.

**1114A.2 Slope.** The maximum slope of ramps on an accessible route shall be no greater than 1 unit vertical in 12 units horizontal (8.33-percent slope). Transitions from ramps to walks, gutters or streets shall be flush and free of abrupt changes.

**1114A.2.1 Cross slope.** The cross slope of ramp surfaces shall be no greater than  $\frac{1}{4}$  inch (6.35 mm) per foot (2.083-percent slope).

**1114A.3 Outdoor ramps.** Outdoor ramps, ramp landings and their approaches shall be designed so that water will not accumulate on the walking surface.

1114A.4 Landings. Ramp landings shall be level and comply with this section.

**1114A.4.1 Location of landings.** Landings shall be provided at the top and bottom of each ramp. Intermediate landings shall be provided at intervals not exceeding 30 inches (762 mm) of vertical rise and at each change of direction. Landings are not considered in determining the maximum horizontal distance of each ramp.

Note: Examples of ramp dimensions are:

SLOPE	MAXIMUM RISE (INCHES)	MAXIMUM HORIZONTAL PROJECTION (feet)
(GRADING %)	(x 25.4 for mm)	(x 304.8) for mm)
1:12 (8.33%)	30	30
1:15 (6.67%)	30	37.5
1:16 (6.25%)	30	40
1:20 (5.00%)	30	50

- **1114A.4.2 Size of top landings.** Top landings shall not be less than 60 inches (1524 mm) wide. Top landings shall have a minimum length of not less than 60 inches (1524 mm) in the direction of the ramp run. See Section 1126A.3 for maneuvering clearances at doors.
- **1114A.4.3 Landing width.** The minimum width of bottom and intermediate landings shall not be less than the width of the ramp.
- **1114A.4.4 Encroachment of doors.** Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76.2 mm) when fully open. (See Figure 11A-6D).
- **1114A.4.5 Strike edge extension.** The width of the landing shall comply with Section 1126A.3 for strike edge extension and maneuvering space at doors.
- **1114A.4.6 Change of direction.** Intermediate and bottom landings at a change of direction in excess of 30 degrees shall have a length in the direction of ramp run of not less than 72 inches (1829 mm). (See Figures 11A-6C and 11A-6D).
- **1114A.4.7 Other intermediate landings.** Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60 inches (1524 mm). (See Figure 11-A6C).
- **1114A.5 Ramp height.** Ramps more than 30 inches (762 mm) above the adjacent floor or ground and open on one or both sides shall be provided with guardrails as required by Section 509. Guardrails shall be continuous from the top of the ramp to the bottom of the ramp.

#### 1114A.6 Ramp handrails.

**1114A.6.1 Where required.** Handrails shall be provided at each side of ramps when the slope exceeds 1 unit vertical in 20 units horizontal (5% slope). Handrails on all ramps shall be continuous.

#### Exceptions:

- Curb ramps.
- Ramps that serve an individual dwelling unit may have one handrail, except that ramps open on one or both sides shall have handrails provided on the open side or sides.

### 1114A.6.2 Handrail configuration.

**1114A.6.2.1 Handrail heights.** The top of handrails shall be 34 to 38 inches (864 to 965 mm) above the ramp surface.

1114A.6.2.2 Handrail ends. Handrail ends shall be returned.

**1114A.6.2.3 Handrail extension.** Handrails shall extend a minimum of 12 inches (305 mm) beyond the top and bottom of the ramp. Where the extension creates a hazard, the termination of the extension shall be rounded or returned smoothly to floor, wall or post. (See Figure 11A-5A).

1114A.6.2.4 Handrail projections. Handrails projecting from a wall shall have a space of 1½ inches (38.1 mm) between the wall and the handrail. Handrails shall not reduce the required minimum clear width of ramps. Handrails may be located in a recess if the recess is a maximum of 3 inches (76.2 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. (See Figure 11A-6B).

1114A.6.2.5 Handrail grips. The handgrip portion of handrails shall not be less than 1½ inches (31.75 mm) nor more than 2 inches (50.8 mm) in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Edges shall have a minimum radius of 1/8 inch (3.17 mm). Handrails shall not rotate within their fittings. (See Figure 11A-6B).

**Note:** For public use areas, public accommodations, and housing which is publicly funded, see Chapter 11B, Division III, Section 1133B.5.5 for provisions of the Division of the State Architect—Access Compliance (DSA-AC).

**1114A.7 Curbs and wheel guides.** Ramps exceeding 10 feet (3048 mm) in length and ramp landings having a vertical drop exceeding 4 inches (101.6 mm), shall be provided with one of the following:

- 1. Guide curbs a minimum of 2 inches (50.8 mm) in height at each side; or
- 2. Wheel guide rails at each side, centered 2 to 4 inches (50.8 to 101.6 mm) above the surface of the ramp or ramp landing.

Exception: Ramps or ramp landings bounded by a wall or fence.

Note: See Figure 11A-5A.

### SECTION 1115A EXTERIOR STAIRWAYS ALONG ACCESSIBLE ROUTES

1115A.1 General. Exterior stairways serving floors or dwelling units required to be accessible shall comply with this section.

Note: This section shall not apply to exterior stairways serving floors or dwelling units not required to be accessible.

1115A.2 Open risers. Open risers shall not be permitted along accessible routes.

**1115A.3 Treads.** All tread surfaces shall be slip resistant. Threads shall have smooth, rounded or chamfered exposed edges, and no abrupt edges at the nosing (lower front edge).

**1115A.4 Nosing.** Nosing shall not project more than 1½inches (38.1 mm) past the face of the riser below. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. (See Figure 11A-6A).

1115A.5 Striping for the visually impaired. Where stairways occur outside a building along accessible routes, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least a minimum of 2 inches (50.8 mm) wide to a maximum of 4 inches (101.6 mm) wide and placed parallel to and not more than 1 inch (25.4 mm) from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip resistant as the treads of the stair. A painted strip shall be acceptable.

#### 1115A.6 Exterior stairway handrails.

**1115A.6.1 Where required.** Stairways shall have handrails on each side, and every stairway required to be more than 88 inches (2235 mm) in width shall be provided with not less than one intermediate handrail for each 88 inches (2235 mm) of required width. Intermediate handrails shall be located equidistant from the sides of the stairway.

**Exception:** Stairways serving an individual dwelling unit may have one handrail, except that stairways open on one or both sides shall have handrails on the open side or sides.

## 1115A.6.2 Handrail configuration.

**1115A.6.2.1 Handrail heights.** The top of handrails shall be 34 to 38 inches (864 to 965 mm) above the nosing of the treads.

1115A.6.2.2 Handrail ends. Ends shall be returned or shall terminate in newel posts or safety terminals.

**1115A.6.2.3 Handrail extension.** Handrails shall extend a minimum of 12 inches (305 mm) beyond the top nosing and 12 inches (305 mm), plus the tread width, beyond the bottom nosing.

Where the extension creates a hazard, the termination of the extension shall be rounded or returned smoothly to floor, wall or post. Where the stairs are continuous from landing to landing, the inner rail shall be continuous and need not extend out into the landing. (See Figures 11A-6A and 11A-6E).

**1115A.6.2.4 Handrail projections.** Handrails projecting from a wall shall have a space of 1½ inches (38.1 mm) between the wall and the handrail.

Handrails may be located in a recess if the recess is a maximum of 3 inches (76.2 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. (See Figure 11A-6B).

1115A.6.2.5 Handrail grips. The handgrip portion of handrails shall not be less than 1½ inches (31.75 mm) nor more than 2 inches (50.8 mm) in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Edges shall have a minimum radius of 1/8 inch (3.17 mm). Handrails shall not rotate within their fittings. (See Figure 11A-6B).

**Note:** For public use areas, public accommodations, and housing which is publicly funded, see Chapter 11B, Division III, Section 1133B.4.2.6 for provisions of the Division of the State Architect—Access Compliance (DSA-AC).

## SECTION 1116A HAZARDS ON ACCESSIBLE ROUTES

**1116A.1 Warning curbs.** Abrupt changes in level exceeding 4 inches (101.6 mm) in vertical dimension, such as changes in level at planters or fountains located in or adjacent to walks, sidewalks or other pedestrian ways shall be identified by curbs or other approved barriers projecting at least 6 inches (152.4 mm) in height above the walk or sidewalk surface to warn the blind of a potential drop-off.

#### Exceptions:

- 1. Between a walk or sidewalk and an adjacent street or driveway.
- 2. When a guardrail or handrail is provided with a wheel guide centered 2 to 4 inches (50.8 to 101.6 mm) above the surface of the walk or sidewalk.
- 1116A.2 Headroom clearance. Walks, pedestrian ways and other circulation spaces which are part of the required egress system shall have a minimum clear headroom of 84 inches (2134 mm). Other walks, pedestrian ways and circulation spaces shall have a minimum clear headroom of 80 inches (2032 mm). If the vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches (2032 mm) nominal dimension, a guardrail or other barrier having its leading edge at or below 27 inches (686 mm) above the finished floor shall be provided. (See Figure 11A-1B.)

Exception: Doorways and archways less than 24 inches (610 mm) in depth may have a minimum clear headroom of 80 inches (2032 mm) nominal. (See Section 1126A.)

- **1116A.3 Overhanging obstructions.** Any obstruction that overhangs a pedestrian way shall be a minimum of 80 inches (2032 mm) above the walking surface as measured from the bottom of the obstruction. Where a guy support is used parallel to a path of travel, including, but not limited to, sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction (see Section 1116A.2 for required headroom clearance).
- **1116A.4 Free-standing signs.** Wherever signs mounted on posts or pylons protrude from the post or pylons and the bottom edge of the sign is 80 inches (2032 mm) above the finished floor or ground level, the edges of such signs shall be rounded or eased and the corners shall have a minimum radius of 0.125 inches (see Section 1116A.2 for required headroom clearance).

## Division III — BUILDING FEATURES

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# SECTION 1117A GENERAL REQUIREMENTS FOR ACCESSIBLE ENTRANCES, EXITS, INTERIOR ROUTES OF TRAVEL AND FACILITY ACCESSIBILITY

**Note**: In addition to provisions of this division, interior routes of travel that provide access to, or egress from, buildings for persons with disabilities shall also comply with Chapter 10.

- **1117A.1 General.** When buildings are required to be accessible, building facilities shall be accessible as provided in this division. Where specific floors of a building are required to be accessible, the requirements of this division shall apply only to the facilities located on accessible floors.
- **1117A.2 Primary entrances and exterior exit doors.** All primary entrances and exterior ground floor exit doors to buildings and facilities on accessible routes shall be accessible to persons with disabilities.
- **1117A.3 Separate dwelling unit entrances.** When a ground-floor dwelling unit of a building has a separate entrance, each such ground-floor dwelling unit shall be served by an accessible route, except where the terrain or unusual characteristics of the site prohibit an accessible route (see Section 1150A for site impracticality tests).
- 1117A.4 Multiple entrances. Only one entrance to covered multifamily buildings is required to be accessible to any one ground floor of a building, except in cases where an individual dwelling unit has a separate exterior entrance. Where the building contains clusters of dwelling units with each cluster sharing a different exterior entrance, more than one entrance may be required to be accessible, as determined by analysis of the site. In every case, the accessible entrance shall be on an accessible route to the covered dwelling units it serves.

## SECTION 1118A EGRESS AND AREAS OF REFUGE

**1118A.1 General.** Including but not limited to the requirements contained in this chapter for accessible routes, signage and emergency warning systems in buildings or portions of buildings required to be accessible shall be provided with accessible means of egress as required by Chapter 10. (See Section 1007.)

## SECTION 1119A INTERIOR ROUTES OF TRAVEL

**1119A.1 General.** When a building or portion of a building is required to be accessible or adaptable, an accessible route shall be provided to all portions of the building, accessible building entrances and to covered multifamily dwelling

units. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public and other building residents. Accessible routes shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes except within an individual dwelling unit.

Accessible routes shall be provided as follows:

- Where more than one route of travel is provided, all routes shall be accessible.
- 2. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces, elements and covered multifamily dwelling units.
- 3. An accessible route shall connect at least one accessible primary entrance of each covered multifamily dwelling unit with interior and exterior spaces and facilities that serve the unit.
- 4. Where elevators are provided for vertical access, all elevators shall be accessible.

**1119A.2 Flooring.** If carpet or carpet tile is used in a common use area or public use area on a ground or floor surface, it shall have firm backing or no backing. The maximum pile height shall be ½ inch (12.7 mm). Exposed edges of carpet shall be

fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 1111A requirements for changes in level.

**1119A.2.1 Recessed doormats.** Recessed doormats shall be adequately anchored to prevent interference with wheelchair traffic.

## SECTION 1120A INTERIOR ACCESSIBLE ROUTES

**Note:** For the purpose of this section, interior accessible routes shall include but not be limited to corridors, hallways, exit balconies and covered or enclosed walkways.

**1120A.1 Widths.** Interior accessible routes serving an occupant load of 10 or more shall not be less than 44 inches (1118 mm) in width. Interior accessible routes serving an occupant load of less than 10 shall not be less than 36 inches (914 mm) in width.

If a person in a wheelchair must make a turn around a corner or an obstruction, the minimum clear width of the accessible route shall be as shown in Figure 11A-1C.

### 1120A.2 Interior accessible routes over 200 feet (60960 mm).

Interior accessible routes that exceed 200 feet (60960 mm) in length shall:

- 1. Have a minimum clear width of 60 inches (1524 mm); or
- 2. Have at a central location a 60-inch by 60-inch (1524 mm by 1524 mm) minimum wheelchair turning space or passing alcove; or
- 3. Have at a central location an intervening cross or tee that is a minimum of 44 inches (1118 mm) in width.

Note: See Figure 11A-1L.

**1120A.3 Changes in elevation.** Interior accessible routes which have changes in elevation shall be transitioned and comply with Section 1121A or 1122A.

Exception: Doors and thresholds as provided in Section 1126A.

### SECTION 1121A CHANGES IN LEVEL ON ACCESSIBLE ROUTES

**1121A.1 Changes in level not exceeding** 1/2 **inch.** Abrupt changes in level along any accessible route shall not exceed ½ inch (12.7 mm). When changes in level do occur, they shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50-percent slope). Changes in level not exceeding ¼ inch (6.35 mm) may be vertical.

**1121A.2 Changes greater than one-half inch.** Changes in level greater than 1/2 inch (12.7 mm) shall be made by means of a sloped surface not greater than 1 unit vertical in 20 units horizontal (5-percent slope), or a curb ramp, ramp, elevator or special access lift. When stairs are located along or adjacent to an accessible route they shall comply with Section 1123A for interior stairways.

## SECTION 1122A INTERIOR RAMPS AND LANDINGS ON ACCESSIBLE ROUTES

**1122A.1 Width.** The width of ramps shall be consistent with the requirements for exits in Chapter 10 of this code, but in no case shall the ramp width be less than the following:

- 1. Ramps serving accessible entrances to covered multifamily buildings where the ramp is the only exit discharge path and serves an occupant load of 300 or more shall have a minimum clear width of 60 inches (1524 mm).
- 2. Ramps serving accessible entrances in Group R occupancies with an occupant load of 10 or less may be 36 inches (914 mm) in clear width.
- 3. All other ramps shall have a minimum clear width of 48 inches (1219 mm).
- 4. Handrails, curbs, wheel guides and/or appurtenances shall not project into the required clear width of a ramp.

Note: See Section 1122A.5.2.4 for handrail projections.

**1122A.2 Slope.** The maximum slope of ramps on an accessible route shall be no greater than 1 unit vertical in 12 units horizontal (8.33-percent slope).

**1122A.2.1 Cross slope.** The cross slope of ramp surfaces shall not exceed  $\frac{1}{4}$  inch (6.35 mm) per foot (2.083-percent slope).

1122A.3 Landings. Ramp landings shall be level and comply with this section.

**1122A.3.1 Location of landings.** Landings shall be provided at the top and bottom of each ramp. Intermediate landings shall be provided at intervals not exceeding 30 inches (762 mm) of vertical rise and at each change of direction. Landings are not considered in determining the maximum horizontal distance of each ramp.

Note: Examples of ramp dimensions are:

Hote: Examples of famp dimensions are:		
SLOPE (GRADING %)	MAXIMUM RISE (Inches) (x 25.4 for mm)	MAXIMUM HORIZONTAL PROJECTION (FEET) (x 304.8) for mm)
1:12 (8.33%) 1:15 (6.67%) 1:16 (6.25%) 1:20 (5.00%)	30 30 30 30 30	30 37.5 40 50

- **1122A.3.2 Size of top landings.** Top landings shall not be less than 60 inches (1524 mm) wide. Top landings shall have a minimum length of not less than 60 inches (1524 mm) in the direction of the ramp run. See Section 1126A.3 for maneuvering clearances at doors. (See Figure 11A-6C).
- **1122A.3.3 Landing width.** The minimum width of bottom and intermediate landings shall not be less than the width of the ramp.
- **1122A.3.4 Encroachment of doors.** Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76.2 mm) when fully open. (See Figure 11A-6d).
- **1122A.3.5 Strike edge extension.** The width of the landing shall comply with Section 1126A.3 for maneuvering clearances at doors.
- **1122A.3.6 Change of direction.** Intermediate and bottom landings at a change of direction in excess of 30 degrees shall have a length in the direction of ramp run of not less than 72 inches (1829 mm). (See Figures 11A-6C and 11A-6D).
- **1122A.3.7 Other intermediate landings.** Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60 inches (1524 mm). (See Figure 11A-6C).
- **1122A.4 Ramp height.** Ramps more than 30 inches (762 mm) above the adjacent floor or ground and open on one or both sides shall be provided with guardrails as required by Section 509. Guardrails shall be continuous from the top of the ramp to the bottom of the ramp.

#### 1122A.5 Ramp handrails.

**1122A.5.1 Where required.** Handrails shall be provided at each side of ramps when the slope exceeds 1 unit vertical in 20 units horizontal (5-percent slope). Handrails on all ramps shall be continuous.

#### Exceptions:

- 1. Curb ramps.
- 2. Ramps that serve an individual dwelling unit may have one handrail, except that ramps open on one or both sides shall have handrails provided on the open side or sides.

#### 1122A.5.2 Handrail configuration.

- **1122A.5.2.1 Handrail heights.** The top of handrails shall be 34 to 38 inches (864 to 965 mm) above the ramp surface.
- 1122A.5.2.2 Handrail ends. Handrail ends shall be returned.
- **1122A.5.2.3 Handrail extension.** Handrails shall extend a minimum of 12 inches (305 mm) beyond the top and bottom of the ramp. Where the extension creates a hazard, the termination of the extension shall be rounded or returned smoothly to floor, wall or post. (See Figure 11A-5A).
- 1122A.5.2.4 Handrail projections. Handrails projecting from a wall shall have a space of 11/2 inches (38.1 mm) between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3 inches (76.2 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. (See Figure 11A-6B).
- **1122A.5.2.5 Handrail grips.** The handgrip portion of handrails shall not be less than 1½ inches (31.75 mm) nor more than 2 inches (50.8 mm) in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Edges shall have a minimum radius of ½ inch (3.17 mm). Handrails shall not rotate within their fittings. (See Figure 11A-6B).

**Note:** For public use areas, public accommodations, and housing which is publicly funded, see Chapter 11B, Division III, Section 1133B.5.5 for provisions of the Division of the State Architect—Access Compliance (DSA-AC).

**1122A.6 Curbs and wheel guides.** Ramps exceeding 10 feet (3048 mm) in length, and ramp landings having a vertical drop exceeding 4 inches, shall be provided with one of the following:

- 1. Guide curbs a minimum of 2 inches (50.8 mm) in height at each side; or
- 2. Wheel guide rails at each side, centered 2 to 4 inches (50.8 to 101.6 mm) above the surface of the ramp or ramp landing.

Exception: Ramps or ramp landings bounded by a wall or fence.

Note: See Figure 11A-5A.

## SECTION 1123A INTERIOR STAIRWAYS ALONG ACCESSIBLE ROUTES

1123A.1 General. Interior stairways serving floors or dwelling units required to be accessible shall comply with this section.

Note: This section shall not apply to interior stairways serving floors or dwelling units not required to be accessible.

**1123A.2 Open risers.** Open risers shall not be permitted along accessible routes.

**1123A.3 Treads.** All tread surfaces shall be slip resistant. Treads shall have smooth, rounded or chamfered exposed edges and no abrupt edges at the nosing (lower front edge).

**1123A.4 Nosing.** Nosing shall not project more than 1½ inches (38.1 mm) past the face of the riser below. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. (See Figure 11A-6A)

1123A.5 Striping for the visually impaired. The upper approach and the lower tread of each stair along routes required to be accessible shall be marked by a strip of clearly contrasting color at least a minimum of 2 inches (50.8 mm) wide to a maximum of 4 inches (101.6 mm) wide placed parallel to, and not more than 1 inch (25.4 mm) from, the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair. A painted strip shall be acceptable.

#### 1123A.6 Interior stairway handrails.

**1123A.6.1 Where required.** Stairways shall have handrails on each side, and every stairway required to be more than 88 inches (2235 mm) in width shall be provided with not less than one intermediate handrail for each 88 inches (2235 mm) of required width. Intermediate handrails shall be located equidistant from the sides of the stairway.

**Exception:** Stairways serving an individual dwelling unit may have one handrail, except that stairways open on one or both sides shall have handrails on the open side or sides.

#### 1123A.6.2 Handrail configuration.

1123A.6.2.1 Handrail heights. The top of handrails shall be 34 to 38 inches (864 to 965 mm) above the nosing of the treads.

**1123A.6.2.2 Handrail ends.** Ends shall be returned or shall terminate in newel posts or safety terminals.

1123A.6.2.3 Handrail extension. Handrails shall extend a minimum of 12 inches (305 mm) beyond the top nosing and 12 inches (305 mm), plus the tread width, beyond the bottom nosing. Where the extension creates a hazard, the termination of the extension shall be rounded or returned smoothly to floor, wall or post. Where the stairs are continuous from landing to landing, the inner rail shall be continuous and need not extend out into the landing. (See Figures 11A-6A and 11A-6E).

1123A.6.2.4 Handrail projections. Handrails projecting from a wall shall have a space of 1½ inches (38.1 mm) between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3 inches (76.2 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. (See Figure 11A-6B).

**1123A.6.2.5 Handrail grips.** The handgrip portion of handrails shall not be less than 1½ inches (31.75 mm) nor more than 2 inches (50.8 mm) in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Edge shall have a minimum radius of ½ inch (3.17 mm). Handrails shall not rotate within their fittings. (See Figure 11A-6B).

**Note:** For public use areas, public accommodations, and housing which is publicly funded, see Chapter 11B, Division III, Section 1133B.4.2.6 for provisions of the Division of the State Architect—Access Compliance (DSA-AC).

## SECTION 1124A ELEVATORS AND SPECIAL ACCESS (WHEELCHAIR) LIFTS

**1124A.1 General.** Elevators provided in covered multifamily buildings shall be accessible and comply with this chapter, and Title 24, Part 7 of the California Code of Regulations.

Exception: Private elevators serving only one dwelling unit.

**1124A.2 Location.** Passenger elevators shall be located on a major accessible route and provisions shall be made to ensure that they remain accessible and usable at all times that the building is occupied.

#### 1124A.3 Size of cab and control locations.

1124A.3.1 General. Elevators serving covered multifamily buildings shall be sized to accommodate a wheelchair in accordance with this section.

**Exception:** When the enforcing agency determines that compliance with any requirement of this section would create an unreasonable hardship, an exception to the requirement shall be granted when equivalent facilitation is provided, and where it can be demonstrated that a person using a wheelchair can enter and operate the elevator.

1124A.3.2 Car inside. The car inside shall allow for the turning of a wheelchair. The minimum clear distance between walls or between wall and door, excluding return panels, shall not be less than 80 inches by 54 inches (2032 mm by 1372 mm) for center-opening doors, and 68 inches by 54 inches (1727 mm by 1372 mm) for side-slide opening doors. (See Figure 11A-7A). Minimum distance from wall to return panel shall not be less than 51 inches (1295 mm).

1124A.3.2.1 Door size. Elevator doors shall provide a minimum clear width of 36 inches (914 mm).

## 1124A.3.3 Car controls.

1124A.3.3.1 Car control location. Elevator floor buttons shall be within 54 inches (1372 mm) above the finish floor for side approach and 48 inches (1219 mm) for front approach. Except for photoelectric tube bypass switches, emergency controls, including the emergency stop and alarm, shall be grouped in or adjacent to the bottom of the panel and shall be no lower than 35 inches (889 mm) from the floor.

For multiple controls only, one set must comply with these height requirements. Floor buttons shall be provided with visual indicators to show when each call is registered. The visual indicators shall be extinguished when each call is answered.

Note: Where possible, a 48-inch (1219 mm) maximum height for elevator floor buttons is preferred.

1124A.3.3.2 Car control buttons. Passenger elevator car controls shall have a minimum dimension of ¾ inch (19.05 mm) and shall be raised 1/8 inch (3.17 mm) plus or minus 1/32 inch (0.8 mm) above the surrounding surface. Control buttons shall be illuminated, shall have square shoulders and shall be activated by a mechanical motion that is detectable. All control buttons shall be designated by a 5/8-inch-minimum (15.87 mm) Arabic numeral, standard alphabet character, or standard symbol immediately to the left of the control button. A Braille symbol shall be located immediately below the numeral, character or symbol. A minimum clear space of 3/8 inch (9.5 mm) or other suitable means of separation shall be provided between rows of control buttons.

Note: See Figure 11A-7B.

The raised characters and symbols shall be white on a black background. Controls and emergency equipment identified by raised symbols shall include, but not be limited to, "door open", "door close", "alarm bell", "emergency stop" and "telephone." The call button for the main entry floor shall be designated by a raised star at the left of the floor designation.

1124A.3.4 Emergency telephone. The emergency telephone handset shall be positioned no higher than 48 inches (1219 mm) above the floor, and the handset cord shall be a minimum of 29 inches (737 mm) in length. If the telephone system is located in a closed compartment, the compartment door hardware shall be a lever type conforming to the provisions of Section 1003.3.1.8. Emergency intercommunication shall not require voice communication.

**1124A.4 Hall call buttons.** Call operation buttons shall be centered 42 inches (1067 mm) above the floor. Buttons shall be a minimum of 3/4-inch (19.05 mm) in size and shall be raised 1/8-inch (3.17 mm) plus or minus 1/32-inch (0.8 mm) above the surrounding surface. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to, and below, hall call buttons shall not project more than 4 inches (101.6 mm) from the wall.

**1124A.5 Minimum illumination.** The minimum illumination at the car controls threshold and the landing when the car and landing doors are open shall not be less than 5 foot-candles (54 lx).

**1124A.6 Hall lantern.** A visual and audible signal shall be provided at each hoistway entrance indicating to the prospective passenger the car answering the call and its direction of travel as follows:

- 1. The visual signal for each direction shall be a minimum of 2½ inches (63.5 mm) high by 2½ inches (63.5 mm) wide, and visible from the proximity of the hall call button.
- 2. The audible signal shall sound once for the "up" direction and twice for the "down" direction or of a configuration which distinguishes between up and down elevator travel.
- 3. The center line of the fixture shall be located a minimum of 6 feet (1829 mm) in height from the lobby floor.
- 4. The use of in-car lanterns, located in or on the car doorjambs, visible from the proximity of the hall call buttons and conforming to the above requirements of this section shall or will be acceptable.

Note: The use of arrow shapes are preferred for visible signals.

#### 1124A.7 Door delay.

**1124A.7.1 Hall call.** The minimum acceptable time from notification that a car is answering a call (lantern and audible signal) until the doors of the car start to close shall be calculated by the following equations but shall be no less than 5 seconds:

T = D / (1.5 ft/s) or T = D / (445 mm/s)

Where T is the total time in seconds and D is the distance from a point in the lobby or landing area 60 inches (1524 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door (see Figure 11A-7D). For cars with in-car lanterns, T begins when the lantern is visible from the vicinity of hall call buttons and an audible signal is sounded.

**1124A.7.2 Door delay for car calls.** The minimum acceptable time for the door to remain fully open after receiving a call shall not be less than 5 seconds.

1124A.8 Doorjamb marking. All elevator hoistway entrances shall have raised floor number designations provided on both jambs. Characters shall be raised Arabic numerals a minimum of 2 inches (50.8 mm) in height with raised Braille symbols placed below the corresponding raised characters. The raised characters shall be on a contrasting background with the centerline of the characters 60 inches (1524 mm) from the floor. Braille symbols shall conform to Sections 1117B.5.5 and 1117B.5.6. On the grade level, a raised five-pointed star shall be placed to the left of the raised character. The outside diameter of the star shall be 2 inches (50.8 mm). Braille shall be placed below the corresponding raised characters (see Figure 11A-7C).

**1124A.9 Door protective and reopening devices.** Doors closed by automatic means shall be provided with a door-reopening device that will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing.

This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact for activation at a nominal 5 inches and 29 inches (127 mm and 737 mm) above the floor.

Door-reopening devices shall remain effective for a period of not less than 20 seconds. After such an interval, the doors may close in accordance with the requirements of ANSI 17.1-86 and the American Society of Mechanical Engineers (ASME) document ASME 17.1-1990.

**1124A.10 Operation and leveling.** The elevator shall be automatic and be provided with a self-leveling feature that will automatically bring the car to the floor landings within a tolerance of plus or minus ½ inch (12.7 mm) under rated loading to zero loading conditions. This self-leveling shall, within its zone, be entirely automatic and independent of the operating device and shall correct the overtravel or undertravel. The car shall also be maintained approximately level with the landing, irrespective of load.

The clearance between the car platform sill and the edge of the hoistway landing shall be no greater than 11/4 inches (31.75 mm).

1124A.11 Special access (wheelchair) lifts. Special access wheelchair lifts may be provided between levels, in lieu of passenger elevators, when the vertical distance between landings, as well as the structural design and safeguards are as allowed by the State of California, the Department of Industrial Relations, Division of Occupational Safety and Health and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation and exit from the lift, and shall comply with restrictions and enhancements of this section in conjunction with Sections 3093 to 3094.5, Part 7 of the California Code of Regulations, Title 24.

## SECTION 1125A HAZARDS ON ACCESSIBLE ROUTES

**1125A.1 Warning curbs.** Abrupt changes in level exceeding 4 inches (101.6 mm) in vertical dimension, such as changes in level at planters or fountains located in or adjacent to walks, halls, corridors, passageways, aisles, pedestrian ways and other circulation spaces shall be identified by curbs projecting at least 6 inches (152.4 mm) in height above the walk or sidewalk surface to warn the blind of a potential drop-off.

**Exception:** When a guardrail or handrail is provided with a wheel guide centered 2 to 4 inches (50.8 to 101.6 mm) above the surface of the walk or sidewalk.

1125A.2 Headroom clearance. Walks, halls, corridors, passageways, aisles, pedestrian ways and other circulation spaces which are part of the required egress system shall have a minimum clear headroom of 84 inches (2134 mm). Other walks, pedestrian ways and circulation spaces shall have a minimum clear headroom of 80 inches (2032 mm). If the vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches (2032 mm) nominal dimension, a guardrail or other barrier having its leading edge at or below 27 inches (686 mm) above the finished floor shall be provided. (See Figure 11A-1B).

**Exception:** Doorways and archways less than 24 inches (610 mm) in depth may have a minimum clear headroom of 80 inches (2032 mm) nominal. (See Section 1126A).

**1125A.3 Overhanging obstructions.** Any obstruction that overhangs a pedestrian way shall be a minimum of 80 inches (2032 mm) above the walking surface as measured from the bottom of the obstruction. Where a guy support is used parallel to a path of travel, including, but not limited to, sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction (see Section 1125A.2 for required headroom clearance).

**1125A.4 Free-standing signs.** Wherever signs mounted on posts or pylons protrude from the posts or pylons and the bottom edge of the sign is less than 80 inches (2032 mm) above the finished floor or ground level, the edges of such signs shall be rounded or eased and the corners shall have a minimum radius of 0.125 inches. (See Section 1125A.2 for required headroom clearance).

## SECTION 1126A DOORS

**1126A.1 Width and height of doors.** Doorways which provide access to common use areas or covered multifamily dwellings shall comply with the following:

- Permit the installation of a door not less than 36 inches (914 mm) in width, not less than 80 inches (2032 mm) in height and provide a clear width of not less than 32 inches (813 mm), measured with the door positioned at an angle of 90 degrees from its closed position.
- 2. Be capable of opening at least 90 degrees.
- 3. A pair of doors, manual or automatic, must have at least one leaf which provides a clear width of not less than 32 inches (813 mm), measured with the door positioned at an angle of 90 degrees from its closed position.
- 4. The width of any component in the egress system shall not be less than the minimum width required by Section 1003.2.3.

Revolving doors shall not be used as required entrances for persons with disabilities.

1126A.2 Level floor or landing. The floor or landing on each side of an exit door shall be level. (See Chapter 10).

**1126A.2.1 Thresholds and changes in elevation at doors.** The floor or landing shall not be more than  $\frac{1}{2}$  inch (12.7 mm) lower than the top of the threshold of the doorway. (See Figure 11A-8I).

Changes in level between ¼ inch (6.35 mm) and ½ inch (12.7 mm) shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50% slope). Changes in level greater than ½ inch (12.7 mm) shall be accomplished by means of a ramp (see Section 1122A).

#### 1126A.3 Maneuvering clearances at doors.

**1126A.3.1 General.** The level floor or landing of an exit door shall have a length in the direction of the door swing of at least 60 inches (1524 mm) and a length opposite the direction of the door swing of at least 44 inches (1118 mm) measured at right angles to the plane of the door in its closed position. (See Figures 11A-8D, 11A-8E and 11A-8F for maneuvering spaces at sliding doors).

**1126A.3.2 Strike edge maneuvering space.** The width of the level area on the side to which the door swings shall extend at least 24 inches (610 mm) past the strike edge of the door for exterior doors and at least 18 inches (457 mm) past the strike edge for interior doors.

Note: Twenty-four inches (610 mm) is preferred for strike-side clearance.

**1126A.3.2.1 Front approach.** The following provisions shall apply to swinging doors with front approach:

- 1. For pull side approach, the level floor or landing shall extend in the direction of the door swing at least 60 inches (1524 mm). (See Figure 11A-8A).
- 2. For push side approach, the level floor or landing shall extend opposite the direction of the door swing at least 48 inches (1219 mm). (See Figure 11A-8A).
- 3. Doors with push side approach having both a closer and a latch shall be provided with a clear and level area extending a minimum of 12 inches (305 mm) past the strike edge on the approach side of the door. (See Figure 11A-8A).

**1126A.3.2.2 Hinge side approach.** The following provisions shall apply to swinging doors with hinge side approach:

 Doors with pull side approach shall be provided with a level floor or landing not less than 60 inches (1524 mm) in depth. A clear and level area shall extend a minimum of 36 inches (914 mm) past the strike edge on the approach side of the door. (See Figure 11A-8B).

**Exception:** Doors with pull side approach and a level floor or landing greater than 60 inches (1524 mm) in depth shall be provided with a clear and level area at least 24 inches (610 mm) past the strike edge of the door for exterior doors and at least 18 inches (457 mm) past the strike edge for interior doors.

2. Doors with push side approach shall have a level floor or landing not less than 44 inches (1118 mm) in depth, and shall be provided with a clear and level area extending a minimum of 54 inches (1372 mm) from the strike edge of the door jamb past the hinge side of the door. Doors with a latch and closer shall have a level floor or landing not less than 48 inches (1219 mm) depth at the push side of the door. (See Figure 11A-8B).

**1126A.3.2.3 Latch side approach.** The following provisions shall apply to swinging doors with latch side approach:

 Doors with pull side approach shall have a level floor or landing not less than 60 inches (1524 mm) in depth, and shall be provided with a clear and level area extending a minimum of 24 inches (610 mm) past the strike edge on the approach side of the door. (See Figure 11A-8C).

**Exception:** Doors serving individual covered multifamily dwelling units shall have a minimum landing depth of 44 inches (1118 mm) except that doors with a closer shall have a minimum landing depth of 54 inches (1372 mm).

2. Doors with push side approach shall have a level floor or landing not less than 44 inches (1118 mm) in depth, and shall be provided with a clear and level area extending a minimum of 24 inches (610 mm) past the strike edge on the approach side of the door. Doors with a closer shall have a level floor or landing not less than 48 inches (1219 mm) depth at the push side of the door. (See Figure 11A-8C).

1126A.3.3 Space between consecutive doors. The minimum space between two hinged or pivoted doors in series, serving other than a required exit stairway, shall provide a minimum of 48 inches (1219 mm) plus the width of the door swinging into the space. Doors in a series shall swing either in the same direction or away from the space between the doors. (See Figure 11A-8G, and 11A-8H).

Where the door opens into a stair or smokeproof enclosure, the landing need not have a minimum length of 60 inches (1524 mm). (See Figure 11A-8H).

**1126A.4 Closer-effort to operate doors.** Maximum effort to operate doors shall not exceed 8½ pounds (38 N) for exterior doors and 5 pounds (22 N) for interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet these standards.

When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate enforcement agency, not to exceed 15 pounds (66.7 N).

**1126A.4.1 Door closer.** If the door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches (75 mm) from the latch, measured to the landing edge of the door.

**1126A.5 Type of lock or latch.** The type of latch and lock required for all doors shall be in accordance with Chapter 10, Section 1003.3.1.8.

**1126A.6 Hand-activated door hardware.** Hand-activated door latching, locking and opening hardware shall be centered between 30 inches (762 mm) and 44 inches (1118 mm) above the floor. Latching and locking doors that are hand-activated and on an accessible route shall be operable with a single effort by lever type hardware, panic bars, push-pull activating bars or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. Locked exit doors shall operate consistent with Section 1126A.4, in the direction of egress.

**1126A.6.1 Lever type hardware.** The lever or lever of actuated latches or locks shall be curved with a return to within ½ inch (12.7 mm) of the door to prevent catching on the clothing of persons during egress.

Exception: Group R and U occupancies with an occupant load of 10 or less.

**1126A.7 Smooth surface.** The bottom 10 inches (254 mm) of all doors and/or gates shall have a smooth, uninterrupted surface to allow the door or gate to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10-inch high (254 mm) smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. (See Figure 11A-8J).

Exception: Automatic and sliding doors or gates.

### SECTION 1127A COMMON USE FACILITIES

Note: For public use facilities, see Chapter 11B of this code.

1127A.1 General. When provided, common use areas and facilities in covered multifamily housing developments shall be accessible to persons with disabilities. Common use facilities include, but are not limited to, lobbies, toilet and bathing facilities, laundry facilities, community rooms, clubhouses, health and fitness facilities, game rooms and portions of common use tenant storage. All entrances, doors, fixtures and controls shall be on an accessible route. Facilities and fixtures required to be accessible shall comply with the following provisions:

- 1. **Doors.** Doors to accessible bathrooms shall comply with Section 1126A. Doors shall not swing into the floor space required for any fixture.
- Clear Floor Space. All fixtures and controls shall be on an accessible route. Clear floor spaces at fixtures and controls, the accessible route and the turning space may overlap. This clear space shall comply with Sections 1127A.9.4 and 1127A.9.5.
- 3. **Water Closets.** Where a toilet stall is provided, it shall comply with Section 1127A.2.1 or 1127A.2.2, and its water closet shall comply with Section 1127A.2.3.
- 4. Lavatory and Mirrors. Where a lavatory and/or mirror is provided, it shall comply with Sections 1127A.3 and/or 1127A.8.3.
- 5. **Controls and Dispensers.** Where controls, dispensers, receptacles or other types of equipment are provided, at least one of each shall be on an accessible route and shall comply with Sections 1127A. 8 and 1127A.9.5.
- 6. **Bathing and Shower Facilities.** Where bathtubs or showers are provided, at least one fixture of each type provided shall be accessible per room. For bathtubs, see Section 1127A.5.2. For showers, see Section 1127A.5.3.
- 7. **Toilet Facilities.** Toilet facilities shall comply with Section 1127A.2.
- 8. Laundry Facilities. Laundry facilities shall comply with Section 1127A.10.
- 9. Storage Facilities. Storage facilities shall comply with Section 1127A.11.
- 10. Fixed or Built-in Seating, Tables and Counters. Fixed or built-in seating, tables and counters shall comply with Section 1127A.12.

**1127A.2 Toilet facilities.** When common use toilet facilities are provided for residents or guests, at least one percent of the total number of fixtures but not less than one of each type shall comply with this section.

**1127A.2.1 Multiple-accommodation toilet facilities.** Multiple-accommodation toilet facilities shall have the following:

#### Notes:

- 1. See definition in Chapter 2.
- 2. See Figure 11A-9A.
- 1. **Wheelchair Clearance.** A clear space measured from the floor to a height of 27 inches (686 mm) above the floor, within the sanitary facility room, of sufficient size to inscribe a circle with a diameter not less than 60 inches (1524 mm), or a clear space 56 inches by 63 inches (1422 mm by 1600 mm) in size. Other than the door to the accessible water closet compartment, a door, in any position, may encroach into this space by not more than 12 inches (305 mm).

- 2. Clear Space at Fixtures. Doors shall not swing into the floor space required for any fixture.
- 3. Accessible Water Closet Compartment. A water closet fixture located in a compartment shall provide a minimum 28-inch-wide (711 mm) clear space from a fixture, or a minimum 32-inch-wide (813 mm) clear space from a wall at one side of the water closet. The other side of the water closet shall provide 18 inches (457 mm) from the centerline of the water closet to the wall. The stall shall be a minimum of 60 inches (1524 mm) wide. A minimum 48-inch-long (1219 mm) clear space shall be provided in front of the water closet if the compartment has an end-opening door (facing the water closet). A minimum 60-inch-long (1524 mm) clear space shall be provided in a compartment with the door located at the side.
- 4. **Grab Bars.** Grab bars shall be installed in accordance with Section 1127A.4 and shall not project more than 3 inches (76.2 mm) into the clear spaces.
- 5. **Compartment Doors.** Compartment doors shall comply with the following:
  - 5.1. The water closet compartment shall be equipped with a door that has an automatic-closing device, and shall have a clear, unobstructed opening width of 32 inches (813 mm) when located at the end and 34 inches (864 mm) when located at the side with the door positioned at an angle of 90 degrees from its closed position.
  - 5.2. When standard compartment doors are used, with a minimum 9-inch (228.6 mm) clearance for footrests underneath and a self-closing device, clearance at the strike edge as specified in Section 1126A.3.2 is not required.
  - 5.3. The inside and outside of the compartment door shall be equipped with a loop or U-shaped handle immediately below the latch. The latch shall be flip-over style, sliding or other hardware not requiring the user to grasp or twist.
  - 5.4. Except for door-opening widths and door swings, a clear, unobstructed access of not less than 44 inches (1118 mm) shall be provided to water closet compartments designed for use by persons with disabilities, and the space immediately in front of a water closet compartment shall not be less than 48 inches (1219 mm) as measured at right angles to compartment door in its closed position.
- 6. Large Toilet Rooms. Where six or more stalls are provided within a multiple-accommodation toilet room, at least one stall shall comply with Section 1127A.2.1, Items 2 and 3. At least one additional stall shall be 36 inches (914 mm) wide with an outward swinging self-closing door and grab bars complying with Sections 1127A.4.3, 1127A.4.4 and 1127A.4.5 installed on each compartment side wall.

**1127A.2.2 Single-accommodation toilet facilities.** Single-accommodation toilet facilities shall comply with the following:

- 1. Wheelchair Clearance. There shall be sufficient space in the toilet room for a wheelchair measuring 30 inches (762 mm) wide by 48 inches (1219 mm) long to enter the room and permit the door to close. There shall be in the room a clear floor space of at least 60 inches (1524 mm) in diameter, or a T-shaped space complying with Figure 11A-1D.
- 2. **Encroachment of Doors.** Doors shall not encroach into the clear floor space specified in Item 1 of this section by more than 12 inches (305 mm), except for the panel door to any water closet compartment. (See Figure 11A-9B).

- 3. Accessible Water Closet. The water closet shall be located in a space which provides a minimum 28-inch-wide (711 mm) clear space from a fixture or a minimum 32-inch-wide (813 mm) clear space from a wall at one side. The other side shall provide 18 inches (457 mm) from the centerline of the water closet to the wall. A minimum 48 inches (1219 mm) of clear space shall be provided in front of the water closet.
- 4. Grab Bars. Grab bars shall be installed in accordance with Section 1127A.4.
- 5. Accessible Route. All doors, fixtures and controls shall be on an accessible route. The minimum clear width of an accessible route shall be 36 inches (914 mm) except at doors, (See Section 1126A). If a person in a wheelchair must make a turnaround an obstruction, the minimum clear width of the accessible route shall be as shown in Figure 11A-1C. (See also Figure 11A-9B).

**1127A.2.3 Water closets.** Water closets required to be accessible shall comply with the following:

- Height. The height of accessible water closets shall be a minimum of 17 inches (432 mm) to a maximum of 19 inches (483 mm) measured to the top of a maximum 2-inch-high (50.8 mm) toilet seat.
- 2. **Controls.** Controls shall be operable with one hand and shall not require tight grasping, pinching or twisting. Controls for the flush valves shall be mounted on the wide side of toilet areas, no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5 pound-force (lbf) (22.2 N).
- 3. **Toilet Seats.** Seats shall not be sprung to return to a lifted position.

1127A.2.4 Accessible urinals. Urinals required to be accessible shall comply with the following:

- Height and Wall Projection. Urinals shall be floor mounted or wall hung. Where one or more wall-hung urinals are provided, at least one with a rim projecting a minimum of 14 inches (356 mm) to a maximum of 17 inches (432 mm) from the wall and a maximum of 17 inches (432 mm) above the floor shall be provided.
- 2. **Flush Controls.** Flush controls shall be operable with one hand, shall not require tight grasping, pinching or twisting of the wrist and shall be mounted no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5 pound-force (lbf) (22.2 N). Electronic automatic flushing controls are acceptable and preferable.
- 3. Clear Floor Space. Where urinals are provided, at least one shall have a clear floor space 30 inches by 48 inches (762 mm by 1219 mm) in front of the urinal to allow forward approach. This clear space shall comply with Sections 1127A.9.4 and 1127A.5.

**1127A.3 Accessible lavatories.** When common use lavatories are provided for residents or guests, at least one, and not less than 1 percent of all lavatories, shall comply with the following:

- Location. Lavatories shall be installed with the centerline of the fixture a minimum of 18 inches (457 mm)
  horizontally from an adjoining wall or fixture. The top of the fixture rim shall be a maximum of 34 inches
  (864 mm) above the finished floor.
- Floor space. A clear maneuvering space at least 30 inches by 48 inches (762 mm by 1219 mm) shall be
  provided in front of accessible lavatories to allow forward approach. Such clear floor space shall adjoin or
  overlap an accessible route and shall not extend into the knee and toe space underneath the lavatory
  more than 19 inches (483 mm). This clear space shall comply with Section 1127A.9.5 for allowable reach
  ranges.
- 3. Knee and Toe Space. Knee and toe space (see Figure 11A-9D) shall be provided as follows:
  - 3.1. The knee space shall be at least 30 inches (762 mm) wide and 8 inches deep (203.2 mm).

- 3.2. The knee space shall be at least 29 inches (737 mm) high at the front face and reducing to not less than 27 inches (686 mm) at a point 8 inches (203.2 mm) back from the front edge.
- 3.3. Knee space required by this section shall be clear and unobstructed.
- 3.4. The toe space required in this section shall be provided as follows:
  - 3.4.1. Shall be at least 30 inches (762 mm) wide and centered on the lavatory.
  - 3.4.2. Shall be at least 17 inches (432 mm) deep, measured from the front edge.
  - 3.4.3. Shall be at least 9 inches (228.6 mm) high from the floor.
- 4. Finished Floor. The finished floor beneath the lavatory shall be extended to the wall.
- 5. **Plumbing Protection.** Hot water and drain pipes accessible under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories.
- 6. **Lavatory Faucet Controls.** Faucet controls and operation mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist.

The force required to activate controls shall be no greater than 5 pound-force (lbf) (22.2N). Lever operated, push type and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

#### 1127A.4 Grab bars, tub and shower seats, fasteners and mounting devices.

**1127A.4.1 General.** Grab bars, tub and shower seats, fasteners and mounting devices required by this chapter shall comply with this section.

1127A.4.2 Location. Grab bars which are located on each side, or on one side and the back, of the accessible toilet stall or compartment shall be securely attached and centered 33 inches (838 mm) above and parallel to the floor, except that, where a tank-type toilet obstructs placement at 33 inches (838 mm), the grab bar may be centered as high as 36 inches (914 mm). The space between the grab bar and objects below shall be a minimum of 1½ inches (38.1 mm). Grab bars shall be at least 42 inches (1067 mm) in length with the front end positioned 24 inches (610 mm) in front of the water closet stool. Grab bars at the back shall not be less than 36 inches (914 mm) in length. (See Figures 11A-9A and 11A-9B).

**1127A.4.3 Diameter or width.** The diameter or width of the gripping surfaces of a grab bar shall be 11/4 inches to 11/2 inches (31.75 mm to 38.1 mm) or of a shape that provides an equivalent gripping surface. If grab bars are mounted adjacent to a wall, the space between the wall and the grab bars shall be 1 ½ inches (38.1 mm). (See Figure 11A-9C).

**1127A.4.4 Structural strength.** The structural strength of grab bars, tub and shower seats, fasteners, and mounting devices shall meet the following specifications:

- 1. Bending stress in a grab bar or seat induced by the maximum bending moment from the application of a 250-pound (1112 N) point load shall be less than the allowable stress for the material of the grab bar or seat.
- 2. Shear stress induced in a grab bar or seat by the application of a 250-pound (1112N) point load shall be less than the allowable shear stress for the material of the grab bar or seat, and if its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall not exceed the allowable shear stress.

- Shear force induced in a fastener or mounting device from the application of a 250-pound (1112
   N) point load shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.
- 4. Tensile force induced in a fastener by a direct tension force of a 250-pound (1112 N) point load, plus the maximum moment from the application of a 250-pound (1112 N) point load, shall be less than the allowable withdrawal load between the fastener and supporting structure.
- 5. Grab bars shall not rotate within their fittings.

**1127A.4.5 Surface.** A grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3.17 mm).

## 1127A.5 Bathing facilities.

**1127A.5.1 General.** When common use bathing facilities are provided for residents or guests, including showers, bathtubs or lockers, at least one of each type of fixture in each facility, and not less than 1 percent of all fixtures, shall comply with this section.

1127A.5.2 Bathtubs. Bathtubs required to be accessible shall comply with the following:

- 1. Floor Space. Clear floor space at bathtubs shall be as shown in Figure 11A-9E.
- 2. **Seat.** An in-tub seat or a seat at the head end of the tub shall be provided as shown in Figures 11A-9E and 11A-9F. The structural strength of seats and their attachments shall comply with Section 1127A.4.4. Seats shall be mounted securely and shall not slip during use.
- 3. **Grab Bars.** Grab bars complying with Sections 1127A.4.3, 1127A.4.4 and 1127A.4.5 shall be provided as shown in Figures 11A-9F and 11A-9G.
- 4. **Controls.** Faucets and other controls shall be located as shown in Figure 11A-9F. They shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than a 5 pound force (lbf) (22.2 N).
- 5. **Shower Spray Unit.** A shower spray unit with a hose at least 60 inches (1524 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided.
- 6. **Bathtub Enclosures.** If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchairs onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims.

1127A.5.3 Showers. Showers required to be accessible shall comply with the following:

- 1. **Size.** Showers shall be consistent with one of the following: (1) 60 inches (1524 mm) minimum in width between wall surfaces and 30 inches (762 mm) minimum in depth with a full opening width on the long side; or (2) 42 inches (1067 mm) in width between wall surfaces and 48 inches (1219 mm) minimum in depth with an entrance opening of 42 inches (1067 mm); or (3) showers 60 inches (1524 mm) minimum in width may be 36 inches (914 mm) minimum in depth as long as the entrance opening width is a minimum 36 inches (914 mm).
- 2. **Thresholds.** When a threshold or recessed drop is permitted, it shall be a maximum of ½ inch (12.7 mm) in height and shall be beveled or sloped at an angle not exceeding 45 degrees (100 percent gradient) from the horizontal.
- 3. **Multiple Showers.** Where, within the same functional area, two or more accessible showers are provided, there shall be at least one shower constructed opposite hand from the other or others (i.e., one left-hand control versus right-hand controls).

4. Accessories. Shower accessories shall include:

Water Controls. Water controls of a single-lever design shall be located on the side wall of the compartment adjacent to the seat and operable with a maximum force of 5 pounds (22.2 N), mounted at 40 inches (1016 mm) [plus or minus 1 inch (25.4 mm) tolerance] above the shower floor. The centerline of the controls shall be within a reach range of no less than 18 inches (457 mm) and no more than 24 inches (610 mm) from the rear edge of the seat.

Hand-held Sprayer Unit. A flexible hand-held sprayer unit with a hose at least 60 inches (1524 mm) long shall be provided within reach range of the seat at a distance not to exceed 27 inches (686 mm) horizontally measured from the rear seat edge to the centerline of the mounting bracket. This unit shall be mounted at a maximum height of 48 inches (1219 mm) [plus or minus 1 inch (25.4 mm) tolerance] above the shower floor.

**Sprayer Unit Alternative.** Where accessible shower facilities are provided in areas subject to excessive vandalism, in lieu of providing the fixed flexible hose, two wall-mounted shower heads shall be installed. Each shower head shall be installed so that it can be operated independently of the other and shall have swivel angle adjustments, both vertically and horizontally. One shower head shall be located at a height of 48 inches (1219 mm) [plus or minus 1 inch (25.4 mm) tolerance] above the floor.

**Floor Slope.** The maximum slope of the floor shall be 2 percent per foot in any direction. Where drains are provided, grate openings shall be a maximum of 1/4 inch (6.35 mm) and located flush with the floor surface.

- 5. **Shower Fixtures.** Shower fixtures shall include:
  - 5.1. A folding seat located within 27 inches (686 mm) of the controls, mounted 18 inches (457 mm) above the floor and with a minimum space of 1 inch (25.4 mm) and maximum space of 1½ inches (38.1 mm) allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6 inches (152.4 mm) from the mounting wall. (See Figures 11A-9H, 11A-9I, 11A-9J and 11A-9K).
  - 5.2. Grab bars located on walls adjacent to and opposite the seat. Grab bars shall comply with the diameter, loading and projection requirements of Sections 1127A.4.3, 1127A.4.4 and 1127A.4.5. Grab bars shall be mounted between a minimum of 33 inches (838 mm) and a maximum of 36 inches (914 mm) above the shower floor with an L-shaped grab bar mounted on walls opposite and adjacent to the front edge of the seat, but not extended to include that portion of wall over the seat. (See Figure 11A-9H or 11A-9I).
- 6. **Soap Dish.** When a soap dish is provided, it shall be located on the control wall at a maximum height of 40 inches (1016 mm) above the shower floor, and within reach limits from the seat.
- 7. Enclosures. Enclosures, when provided for shower stalls, shall not obstruct transfer from wheelchairs onto shower seats.

Note: See Figures 11A-9H, 11A-9I, 11A-9J and 11A-9K.

**1127A.5.3.1 Open showers.** Where no separate shower compartments are provided, the shower for persons with disabilities shall be located in a corner with L-shaped grab bars extending along two adjacent walls with a folding seat adjacent to the shower controls. (See Figures 11A-9H, 11A-9I, 11A-9J and 11A-9K).

#### 1127A.6 Lockers.

**1127A.6.1 General.** Where lockers are provided for residents or guests, at least one locker and not less than 1 percent of all lockers shall be accessible to persons with disabilities. A path of travel not less than 36 inches (914 mm) in clear width shall be provided to these lockers. See Section 1127A.9 for required clear space, allowable reach ranges and requirements for control and operating mechanisms.

## 1127A.7 Signs.

**1127A.7.1 General.** All accessible toilet and bathing facilities shall be identified by the "International Symbol of Accessibility." Signs need not be provided for facilities within a dwelling unit or guestroom.

1127A.7.2 Identification symbols. Doorways leading to men's sanitary facilities shall be identified by an equilateral triangle 1/4 inch thick (6.4 mm) with edges 12 inches (305 mm) long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle, 1/4 inch-thick (6.4 mm) and 12 inches (305 mm) in diameter. Unisex sanitary facilities shall be identified by a circle 1/4-inch thick (6.4 mm), 12 inches (305 mm) in diameter with a 1/4-inch-thick (6.4 mm) triangle superimposed on the circle and within the 12 inch (305 mm) diameter. These geometric symbols shall be centered on the door at a height of 60 inches (1524 mm) and their color and contrast shall be distinctly different from the color and contrast of the door.

Note: See also Section 1143A.10 for additional signage requirements applicable to sanitary facilities.

#### 1127A.8 Toilet room fixtures and accessories.

**1127A.8.1 Towel, sanitary napkins, waste receptacles.** Where towel, sanitary napkins, waste receptacles and other similar dispensing and disposal fixtures are provided, at least one of each type shall be located with all operable parts, including coin slots, within 40 inches (1016 mm) from the finished floor. Controls and operating mechanisms shall comply with Section 1127A.9.6.4.

**1127A.8.2 Toilet tissue dispensers.** Toilet tissue dispensers shall be located on the wall within 12 inches (305 mm) of the front edge of the toilet seat. Dispensers that control delivery or that do not permit continuous paper flow shall not be used. (See Figure 11A-9B).

**1127A.8.3 Mirrors.** Where mirrors are provided, at least one shall be accessible. Mirrors shall be mounted with the bottom edge no higher than 40 inches (1016 mm) from the floor.

### 1127A.9 Space allowances and reach ranges in common use areas.

**1127A.9.1 Wheelchair passage width.** The minimum clear width for single wheelchair passage shall be 36 inches (914 mm) continuously. (See Figure 11A-1E).

Exception: Thirty-two inches (813 mm) in width is acceptable at a point not to exceed 24 inches (610 mm) in length.

**1127A.9.2 Width for wheelchair passing.** The minimum width for two wheelchairs to pass is 60 inches (1524 mm) (see Figure 11A-1F).

**1127A.9.3 Wheelchair turning space.** The space required for a wheelchair to make a 180-degree turn is a clear space of 60 inches (1524 mm) diameter (See Figure 11A-1D(a) or a T-shaped space, see Figure 11A-1D(b)).

### 1127A.9.4 Clear floor or ground space for wheelchairs.

1127A.9.4.1 Size and approach. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (762 mm by 1219 mm). (See Figure 11A-1G.) The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object (See Figure 11A-1G). Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.

**1127A.9.4.2 Relationship of maneuvering clearances to wheelchair spaces**. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or a part of three sides, additional maneuvering clearances shall be provided as shown in Figure 11A-1H.

**1127A.9.4.3 Surfaces of wheelchair spaces.** Clear floor or ground spaces for wheelchairs shall comply with Sections 1119A.2, 1120A.3 and 1121A.

**1127A.9.4.3.1 Gratings.** Gratings located in ground and floor surfaces along accessible routes shall be limited to spaces no greater than ½-inch (12.7 mm) wide in one direction. If gratings have elongated openings, they shall be placed so that the long dimension is perpendicular to the dominate direction of traffic.

## 1127A.9.5 Reach ranges.

1127A.9.5.1 Forward reach. If the clear floor space allows only forward approach to an object, the maximum high forward reach allowed shall be 48 inches (1219 mm) and the minimum low forward reach shall be unobstructed and no less than 15 inches (381 mm) above the floor (see Figure. 11A-11(a)). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 11A-11(b).

1127A.9.5.2 Side reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches (1372 mm) and the low side reach shall be no less than 9 inches (228.6 mm) above the floor (see Figure 11A-1J(a) and 11A-1J(b)). If the side reach is over an obstruction, the reach and clearances shall be as shown in Figure 11A-1JC).

#### 1127A.9.6 Controls and operating mechanisms.

Note: See also Section 1142A, for electrical installation.

**1127A.9.6.1 General.** Controls and operating mechanisms in accessible spaces, along accessible routes or as part of accessible elements (e.g., light switches and dispenser controls) shall comply with this section.

**1127A.9.6.2 Clear floor space.** Clear floor space complying with Section 1127A.9.4 that allows a forward or parallel approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles and other operable equipment.

1127A.9.6.3 Height. Controls shall be located no higher than 48 inches (1219 mm), and no lower than 15 inches (381 mm), above the finished floor measured to the center of the grip. If the reach is over an obstruction (for example, washer or dryer) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Controls that do not satisfy these specifications are acceptable, provided that comparable controls or outlets, that perform the same functions, are provided within the same area and are accessible.

**1127A.9.6.4 Operation.** Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist.

The force required to activate controls shall be no greater than 5 pounds (22.2 N) of force.

#### 1127A.10 Common accessible laundry rooms.

**1127A.10.1 General.** Where common use laundry rooms are provided, at least one of each type of appliance provided in each laundry area shall be accessible, shall be on an accessible route and shall comply with this section. Such appliances include clothes washing machines, dryers, soap dispensers and any related features such as wash sinks, tables and storage areas.

Where laundry rooms are provided on floors of an elevator building, each laundry room shall be accessible. Where there is one laundry room on a ground floor in each building, each laundry room shall be accessible. Where there is a laundry room on the ground floor of a building and another located in the basement, it is acceptable to have only the ground floor laundry room accessible.

1127A.10.2 Clear floor space. There shall be a minimum clear space 30 inches perpendicular by 48 inches parallel (762mmby 1219 mm) in front of clothes washers and dryers required to be accessible. There shall be a minimum clear space 30 inches by 48 inches (762 mm by 1219 mm) provided for at least one of each type of fixture or appliance provided in the laundry room (e.g. soap dispensers, wash sinks, tables, storage areas).

1127A.10.3 Controls. Clothes washers and dryers including stacked clothes washers and dryers required to be accessible shall have controls (including coin slots) within the reach range of a seated user. Controls shall be located no higher than 48 inches (1219 mm), and no lower than 15 inches (381 mm), above the finished floor measured to the center of the grip. If the reach is over an obstruction (for example, washer or dryer) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach. Controls that do not satisfy these specifications are acceptable, provided that comparable controls or outlets, that perform the same functions, are provided within the same area and are accessible. Controls shall be operable with one hand and not require tight grasping, pinching or twisting of the wrist.

**1127A.10.4 Washing machines and clothes dryer.** Washing machines and clothes dryers in accessible common use laundry rooms shall be front loading.

### 1127A.11 Storage.

**1127A.11.1 General.** If fixed storage facilities such as cabinets, shelves, closets or drawers are provided where access is required by Sections 108.2.1.2 and 1102A, at least one of each type of facility provided shall comply with this section. Additional storage may be provided outside of the reach ranges shown in Figure 11A-1J.

**1127A.11.2 Clear floor space.** A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1127A.9.4 that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities.

1127A.11.3 Height. Accessible storage spaces shall be within at least one of the reach ranges specified in Section 1127A.9.5. Clothes rods shall be a maximum of 54 inches (1372 mm) from the floor for a side approach (see Figure 11A-1J). Where the distance from the wheelchair to the clothes rod or shelf exceeds 10 inches (254 mm), as in closets without accessible doors, the height and depth to the rod or shelf shall comply with Figure 11A-1J.

**1127A.11.4 Hardware.** Hardware for accessible storage facilities shall comply with Section 1127A.9.6. Touch latches and U-shaped pulls are acceptable.

#### 1127A.12 Fixed or built-in seating, tables and counters

**1127A.12.1 Minimum seating.** Where fixed or built-in seating, tables or counters are provided for residents or guests, 5 percent, but not less than one, shall be accessible as provided in this section.

- **1127A.12.2 Seating.** When seating spaces for persons in wheelchairs are provided at fixed tables or counters, clear floor space complying with Section 1127A.9.4 shall be provided. Such clear floor space shall not overlap knee space by more than 19 inches (483 mm). (See Figure 11A-1K).
- **1127A.12.3 Knee clearance.** When seating for persons in wheelchairs is provided at fixed tables or counters, knee spaces at least 27 inches (686 mm) high, 30 inches (762 mm) wide and 19 inches (483 mm) deep shall be provided. (See Figure 11A-1K).
- **1127A.12.4 Height of work surfaces.** The tops of tables and counters shall be 28 inches to 34 inches (711mmto 864 mm) from the floor or ground.

#### Division IV - DWELLING UNIT FEATURES

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## SECTION 1128A COVERED DWELLING UNITS

**1128A.1 General.** Covered multifamily dwelling units shall be adaptable and accessible into and throughout the dwelling unit as provided in this division.

Note: See Sections 1101A "Application" and 1102A "Building Accessibility" for dwelling units required to comply with this division.

## **SECTION 1129A**

Reserved

## SECTION 1130A ACCESSIBLE ROUTE WITHIN COVERED MULTIFAMILY DWELLING UNITS

**1130A.1 General.** An accessible route shall be provided through all rooms and spaces of the dwelling unit. The accessible route shall pass through the primary entry door, and shall connect with all additional exterior doors, required clear floor spaces at kitchen appliances and bathroom fixtures. For the purpose of this section, "accessible routes" may include hallways, corridors and ramps.

**Exception:** An accessible route is not required from the interior of the unit into a basement or garage, except as provided in Section 1105A 1

## SECTION 1131A CHANGES IN LEVEL ON ACCESSIBLE ROUTES

- **1131A.1 Changes in level not exceeding** 1/2 **inch.** Abrupt changes in level along any accessible route shall not exceed ½ inch (12.7 mm). When changes in level do occur, they shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50-percent slope). Changes in level not exceeding 1/4 inch (6.35 mm) may be vertical.
- **1131A.2 Changes greater than** 1/2 **inch.** Changes in level greater than 1/2 inch (12.7 mm) shall be made by means of a ramp, elevator or special access lift. See Section 1122A for ramps and Section 1124A.11 for special access lifts.

#### SECTION 1132A DOORS

**1132A.1 Primary entry doors and required exit doors.** The primary entry door and all required exit doors shall comply with the requirements of this section. The requirements of Sections 1126A.3 shall apply to maneuvering

clearances at the side of the door exposed to common or public use spaces (e.g. entry or exit doors which open from the covered multifamily dwelling unit into a corridor, hallway or lobby, or directly to the outside).

**1132A.2** Interior doors and secondary exterior doors. Doors intended for user passage and secondary exterior doors shall comply with this section. The provisions of this section shall apply to the dwelling unit side of doors leading from the interior of the dwelling unit to an unfinished basement or a garage attached to a single-story dwelling unit.

1132A.3 Width and height of doors. Doors shall comply with the following:

- 1. Doors shall not be less than 6 feet 8 inches (2032 mm) in height.
- 2. Swinging doors shall provide a net clear opening width of not less than 32 inches (813 mm), measured with the door or doors positioned at an angle of 90 degrees from the closed position. A 34-inch (864 mm) door is acceptable. The primary entry door and all required exit doors shall comply with the requirements of Section 1126A.1.
- 3. Swinging doors shall be capable of opening at least 90 degrees.
- 4. A nominal 32-inch (813 mm) clear opening provided by a standard 6-foot wide (1829 mm) sliding patio door assembly is acceptable.
- 5. A pair of doors, manual or automatic, must have at least one leaf which provides a clear width of not less than 32 inches (813 mm), measured with the door positioned at an angle of 90 degrees from its closed position.
- 6. The width of any component in the means of egress system shall not be less than the minimum width required by Section 1003.2.3.

**1132A.4 Level floor or landing.** See also Chapter 10, Section 1003.3.1.6.2. The floor or landing on each side of a door shall be level. Primary entry doors, required exit doors or secondary exterior doors with changes in height between the interior surface or floor level and the exterior surface or floor level shall comply with the following:

- 1. Exterior landings of impervious construction (e.g., concrete, brick, flagstone) serving primary entry doors and required exit doors are limited to not more than ½ inch (12.7 mm) of change in height between floor surfaces. Changes in level shall comply with Section 1131A.
- 2. Exterior landings of pervious construction (e.g., wood decking with spaces) shall be the same level as the interior landing, except that secondary exterior doors may have no more than ½ inch (12.7 mm) of change in height between floor surfaces. Changes in level shall comply with Section 1131A.
- 3. Secondary exterior doors onto decks, patios or balcony surfaces constructed of impervious materials (e.g., concrete, brick, flagstone) may have a maximum change in height from the interior landing of 4 inches (101.6 mm). Changes in height greater than 1/2 inch (12.7 mm) shall be accomplished by means of a ramp.
- 4. In buildings containing covered multifamily dwelling units, the floor or landing immediately outside the entry may be sloped up to 1/4 inch (6.35 mm) per foot (12 inches) (305 mm), in a direction away from the primary entrance of the dwelling unit for drainage.

1132A.4.1 Thresholds. Thresholds at the primary entry and required exit doors shall be no higher than 1/2 inch (12.7 mm). Thresholds at secondary exterior doors, including sliding door tracks, shall be no higher than 3/4 inch (19.05 mm). Changes in height at interior door thresholds (e.g. floor material changes at door thresholds) shall not exceed 1/2 inch (12.7 mm). Thresholds shall comply with the following:

- 1. Thresholds with a change in height of not more than 1/4 inch (6.35 mm) may be vertical.
- 2. Thresholds with a change in height between 1/4 inch (6.35 mm) and 3/4 inch (19.05 mm) shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50-percent slope).

#### 1132A.5 Maneuvering clearances at doors.

**1132A.5.1 General.** Maneuvering clearances at interior doors shall provide a minimum length on both sides of the door of at least 42 inches (1067 mm) measured at a right angle to the plane of the door in its closed position.

#### Exceptions:

- A 39 inch (991 mm) length is acceptable when a minimum clear opening width of 34 inches (864 mm) is provided.
- 2. The floor or landing on the dwelling unit side of the primary entry door and any required exit door shall have a minimum length of not less than 44 inches (1118 mm). Section 1126A.3 shall apply to maneuvering clearances at the side of the door exposed to common or public use spaces.

Note: See Section 1110A.5.3, Item 4.

**1132A.5.2 Strike edge maneuvering space at doors.** The width of the level area on the side to which the door swings shall extend 18 inches (457 mm) past the strike edge for all doors. The width of the level area at the exterior side of the primary entry door and any required exit doors shall comply with Section 1126A.

#### Notes

- 1. See Section 1134A for bathrooms that are required to be accessible.
- 2. Twenty-four inches (610 mm) is preferred for strike edge clearance.

**1132A.6 Closer-effort to operate doors.** Maximum effort to operate doors shall not exceed 8½ pounds (38 N) for exterior doors and 5 pounds (22 N) for interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet these standards.

When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate enforcement agency, not to exceed 15 pounds (66.7 N).

- **1132A.7 Type of lock or latch.** The type of latch and lock required for all doors shall be in accordance with Chapter 10, Section 1003.3.1.8.
- 1132A.8 Hand-activated door hardware. Hand-activated door latching, locking and opening hardware shall be centered between 30 inches (762 mm) and 44 inches (1118 mm) above the floor. Latching and locking doors that are hand-activated and on an accessible route shall be operable with a single effort by lever-type hardware, panic bars, push-pull activating bars or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. Locked exit doors shall operate consistent with Section 1132A.6, in the direction of egress.
  - **1132A.8.1 Lever-type hardware.** The lever or lever of actuated latches or locks shall be curved with a return to within 1/2 inch (12.7 mm) of the door to prevent catching on the clothing of persons during egress in Group R and U occupancies with an occupant load greater than 10.
- **1132A.9 Smooth surface.** The bottom 10 inches (254 mm) of all doors shall have a smooth, uninterrupted surface to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10-inch-high (254 mm) smooth panel shall be installed on the push side of the door which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. (See Figure 11A-8J).

Exception: Automatic and sliding doors.

**1132A.10 Door signal devices.** Every primary entrance to a covered multifamily dwelling unit shall be provided with a door buzzer, bell, chime or equivalent, The activating mechanism shall be mounted a maximum of 48 inches (1219 mm) above the floor and connected to permanent wiring.

### SECTION 1133A KITCHENS

1133A.1 General. Kitchens shall be on an accessible route and shall comply with this section.

1133A.2 Clear floor space. Clear floor space at kitchens shall comply with the following:

- 1. A clear floor space at least 30-inches (762 mm) by 48-inches (1219 mm) that allows a parallel approach by a person in a wheelchair shall be provided at the range or cooktop.
- 2. A clear floor space at least 30 inches (762 mm) by 48 inches (1219 mm) that allows either a parallel or forward approach shall be provided at the kitchen sink and all other fixtures or appliances including the oven, dishwasher, refrigerator/freezer and trash compactor.
- 3. The centerline of the 30-inch (762 mm) by 48-inch (1219 mm) clear floor space provided for parallel or forward approach shall be aligned with the centerline of the appliance or fixture. (See Figure 11A-10A).

**1133A.2.1 Clear width.** Kitchens shall have a minimum clear width measured between any cabinet, countertop or the face of any appliance (excluding handles and controls) that projects into the kitchen and the opposing cabinet, countertop, appliance or wall as follows:

- 1. U-shaped kitchens, designed with parallel approach at a range or cooktop located at the base of the U, shall have a minimum clear width of at least 60 inches (1524 mm). (See Figure 11A-10A).
- U-Shaped kitchens, designed with a cooktop or sink located at the base of the U which provides a 30-inch-wide (762 mm) knee space to a height of 27 inches (686 mm) above the floor to allow for a forward approach, shall have a clear width of at least 48 inches (1219 mm). (See Figure 11A-10A).
- 3. All other kitchen designs shall provide a minimum clear width of at least 48 inches (1219 mm). (See Figure 11A-10A).

**1133A.3 Removable base cabinets.** Base cabinets directly under the kitchen sink counter area, including toeboard and shelving, shall be removable without the use of specialized tools or specialized knowledge in order to provide clearance for a wheelchair. The finish floor beneath the kitchen sink counter area shall be extended to the wall.

**1133A.4 Countertops.** Kitchen countertops shall comply with this section and shall be provided with the following (see Section 1133A.4.1 for repositionable countertop requirements):

- A minimum linear length of 30 inches (762 mm) of countertop shall be provided for the kitchen sink installation.
- 2. A minimum linear length of 30 inches (762 mm) of countertop shall be provided for a work surface.
- 3. The sink and work surface may be a single integral unit a minimum of 60 inches (1524 mm) in length, or be separate components.

Exception: Two 15-inch (381 mm) minimum width breadboards may be provided in lieu of the required30 inches (762 mm) of countertop work surface.

**1133A.4.1 Repositionable countertops.** Repositionable countertops shall be provided in a minimum of 5 percent of the covered multifamily dwelling units. Repositionable countertops shall comply with the following:

- 1. The kitchen sink and work surface space required by Section 1133A.4 shall be designed to enable repositioning to a minimum height of 28 inches (711 mm).
- 2. Base cabinets directly under the kitchen sink and work surface shall be removable to provide clearance for a wheelchair.

- 3. The sides of adjacent cabinets and the back wall, which may become exposed to moisture or food handling when a countertop is lowered, shall be constructed of durable, nonabsorbent materials appropriate for such uses.
- 4. Finished flooring shall be extended to the wall beneath the sink and work surface.

#### Exceptions:

- 1. Stone, cultured stone and tiled countertops may be used without meeting the repositioning requirements.
- Two 15-inch (381 mm) minimum width breadboards may be provided in lieu of the required 30 inches (762 mm) of countertop work surface.

**1133A.5 Lower shelving.** Lower shelving and/or drawer space shall be provided in the kitchen at a height of no more than 48 inches (1219 mm) above the floor.

**1133A.6 Kitchen sink faucet controls.** Faucet controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pound force (22.2N). Lever-operated, push-type and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

## SECTION 1134A BATHING AND TOILET FACILITIES

**1134A.1 General.** All bathrooms, bathing and toilet facilities within covered multifamily dwelling units shall comply with this section.

1134A.2 Number of complying bathrooms. Bathrooms shall be designed to comply with one of the following options:

Option 1. All bathrooms within the dwelling unit shall be designed to comply with the following:

- 1. Toilet, bathing and shower facilities shall comply with Section 1134A.4.
- 2. Bathtubs shall comply with Section 1134A.5.
- 3. Showers shall comply with Section 1134A.6.
- 4. Water closets shall comply with Section 1134A.7.
- 5. Lavatories, vanities, mirrors and towel fixtures shall comply with Section 1134A.8.
- 6. Bathrooms shall be provided with an accessible route into and through the bathroom.
- 7. If a door is provided, it shall comply with the requirements of Section 1132A.5.
- 8. A minimum 18-inch (457 mm) clear maneuvering space shall be provided on the swing side of the door at the strike edge of the door.
- 9. Switches, outlets and controls shall comply with Section 1142A.
- 10. Reinforced walls to allow for the future installation of grab bars around the toilet, tub and shower shall comply with Sections 1134A.5 for bathtubs, 1134A.6 for showers and 1134A.7 for water closets. Grab bars shall comply with Section 1127A.4.

Option 2. Only one bathroom within the dwelling unit shall be designed to comply with the following:

- 1. Toilet, bathing and shower facilities shall comply with Section 1134A.4.
- 2. Bathtubs shall comply with Section 1134A.5.

- 3. Showers shall comply with Section 1134A.6.
- 4. Water closets shall comply with Section 1134A.7.
- Lavatories, vanities, mirrors and towel fixtures shall comply with Section 1134A.8.
- Where both a tub and shower are provided in the bathroom, at least one shall be made accessible. See Section 1134A.5 for bathtubs, or Section 1134A.6 for showers.
- 7. When two or more lavatories are provided, at least one shall be made accessible and comply with Section 1134A.8.
- 8. Bathrooms shall be provided with an accessible route into and through the bathroom.
- 9. If a door is provided, it shall comply with the requirements of Section 1132A.5.
- 10. A minimum 18-inch (457 mm) clear maneuvering space shall be provided on the swing side of the door at the strike edge of the door.
- 11. Switches, outlets and controls shall comply with Section 1142A.
- 12. Reinforced walls to allow for the future installation of grab bars around the toilet, tub and shower shall comply with Sections 1134A.5 for bathtubs 1134A.6 for showers and 1134A.7 for water closets. Grab bars shall comply with Section 1127A.4. When Option 2 is used, all additional bathrooms must comply with Items 8 through 12 above.

**1134A.3 Powder rooms.** All powder rooms located on floor levels required to be accessible shall comply with Items 1 through 6 of this section. When the powder room is the only toilet facility located on an accessible level, it shall comply with Items 1 through 7 of this section.

- 1. Accessible Route. Powder rooms shall be provided with an accessible route into and through the powder room and shall comply with Section 1134A.4.
- 2. Doors. If a door is provided, it shall comply with the requirements of Section 1132A.5.
- 3. Water Closets. Water closets shall comply with Section 1134A.7.
- **4.** Lavatories, Vanities, Mirrors and Towel Fixtures. Lavatories, vanities, mirrors and towel fixtures shall comply with Section 1134A.8.
- **5. Strike Edge Maneuvering Space.** A minimum 18-inch (457 mm) clear maneuvering space shall be provided on the swing side of the door at the strike edge of the door.
- **6.** Accessible Switches, Outlets and Controls. Switches, outlets and controls shall comply with Section 1142A.
- 7. Reinforced Walls for Grab Bars. Reinforced walls to allow for the future installation of grab bars around the toilet shall comply with Section 1134A.7 for water closets. Grab bars shall comply with Section 1127A.4.

**1134A.4 Sufficient maneuvering space.** Bathing and toilet facilities required to be adaptable shall provide sufficient maneuvering space for a person using a wheelchair or other mobility aid to enter and close the door, use the fixtures, reopen the door and exit.

Where the door swings into the bathroom or powder room, there shall be a clear maneuvering space outside the swing of the door of at least 30 inches by 48 inches (762 mm by 1219 mm) within the room. The clear maneuvering

space shall allow the user to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit use of fixtures. Doors may swing into the required clear space at any fixture when a clear maneuvering space is provided outside the swing arc of the door so it can be closed. Maneuvering spaces may include any knee space or toe space available below bathroom fixtures.

1134A.5 Bathtubs. Bathtubs required to be accessible shall comply with this section.

- 1. Floor Space. There shall be a minimum clear floor space 48 inches parallel by 30 inches perpendicular (1219 mm by 762 mm) to the side of a bathtub or bathtub-shower combination (measured from the foot or drain end of the bathtub) to provide for the maneuvering of a wheelchair and transfer to and from the bathing facilities. The area under a lavatory may be included in the clear floor space provided the knee and toe space comply with Section 1134A.8. Cabinets under lavatories and toilets shall not encroach into the clear floor space.
- 2. Reinforced Walls for Grab Bars. A bathtub installed without surrounding walls shall provide reinforced areas for the installation of floor-mounted grab bars. Where a bathtub is installed with surrounding walls, grab bar reinforcement shall be located on each end of the bathtub, 32 inches to 38 inches (813 mm to 965 mm) above the floor, extending a minimum of 24 inches (610 mm) from the front edge of the bathtub toward the back wall of the bathtub. The grab bar reinforcement shall be a minimum of 6 inches (152.4 mm) nominal in height. (See Figure 11A-9G). Grab bar reinforcement shall be installed on the back wall of the bathtub a maximum of 6 inches (152.4 mm) above the bathtub rim extending upward to at least 38 inches (965 mm) above the floor. Grab bar backing shall be installed horizontally to permit the installation of a 48-inch (1219 mm) grab bar with each end a maximum of 6 inches (152.4 mm) from the end walls of the bathtub. The grab bar reinforcement shall be a minimum of 6 inches (152.4 mm) nominal in height.
- 3. Bathtub Controls. Faucet controls and operation mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pound-force (22.2 N). Lever operated, push type and electronically controlled mechanisms are examples of acceptable designs.
- 4. Shower Unit. A shower spray unit is not required in bathtubs.
- 5. Bathtub Enclosures. Doors and panels of bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged doors shall open outward. Glazing used in doors and panels of bathtub enclosures shall be fully tempered, laminated safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 1/8 inch (3.17 mm) when fully tempered, or 1/4 inch (6.35 mm) when laminated, and shall pass the test requirements of this part, Chapter 24, Glass and Glazing. Plastics used in doors and panels of bathtub enclosures shall be of a shatter-resistant type.

1134A.6 Showers. Showers required to be accessible shall comply with this section.

- 1. **Size.** When a shower stall is provided, at least one shower stall shall measure at least 42 inches wide by 48 inches deep (1067 mm by 1219 mm) with an entrance opening of at least 36 inches (914 mm). The maximum slope of the shower floor shall be ½ inch (12.7 mm) per foot in any direction and shall slope toward the rear to drain located within 6 inches (152.4 mm) of the rear wall. The floor surfaces shall be of Carborundum or grit-faced tile or of material providing equivalent slip resistance.
- 2. **Floor Space.** A clear maneuvering space at least 30 inches in width by 48 inches in length (762 mm by 1219 mm) shall be located outside the shower, flush and parallel to the control wall.
- 3. **Reinforced Walls for Grab Bars.** Grab bar reinforcement shall be installed continuous in the walls of showers 32 inches to 38 inches (813 mm to 965 mm) above the floor. The grab bar reinforcement shall be a minimum of 6 inches (152.4 mm) nominal in height. Glass-walled shower stalls shall provide reinforcement for installation of floor-mounted or ceiling-mounted grab bars.
- 4. **Thresholds.** When a threshold (a recessed drop) is used, it shall be a maximum of ½ inch (12.7 mm) in height and have a beveled or sloped angle not exceeding 45 degrees from the horizontal.

- 5. **Shower Controls.** Faucet controls and operation mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pound-force (22.2N). Lever operated, push-type and electronically controlled mechanisms are examples of acceptable designs.
- 6. **Shower Enclosures.** Doors and panels of shower enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward. Glazing used in doors and panels of shower enclosures shall be fully tempered, laminate safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 1/8 inch (3.17 mm) when fully tempered, or 1/4 inch (6.35 mm) when laminated, and shall pass the test requirements o this part, Chapter 24, Glass and Glazing. Plastics used in doors and panels of showers enclosures shall be of shatter-resistant type.

**1134A.7 Water closets.** Water closets in bathrooms or powder rooms required to be accessible shall comply with this section.

 Floor Space. The water closet shall be located in a space a minimum of 36 inches (914 mm) in clear width with 48 inches (1219 mm) minimum clear space provided in front of the water closet. This space may include maneuverable space under a lavatory, if provided and arranged so as not to impede access.

**Exception:** In covered multifamily dwelling units, the water closet may be located in a space 48 inches (1219 mm) in clear width with 36 inches (914 mm) of clear space provided in front of the water closet. Water closets shall be located within bathrooms in a manner that permits a grab bar to be installed on one side of the fixture. In locations where water closets are adjacent to walls or bathtubs, the centerline of the fixture shall be a minimum of 18 inches (457 mm) from the obstacle. The other (nongrab bar) side of the water closet shall be a minimum of 18 inches (457 mm) from the centerline of the fixture to the finished surface of adjoining walls, vanities or from the edge of a lavatory.

2. Reinforced Walls for Grab Bars. Where the water closet is not placed adjacent to a side wall, the bathroom shall have provisions for installation of floor-mounted, foldaway or similar alternative grab bars. Where the water closet is placed adjacent to a side wall, reinforcement shall be installed on both sides or one side and the back. If reinforcement is installed at the back, it shall be installed between 32 inches (813 mm) and 38 inches (965 mm) above the floor. The grab bar reinforcement shall be a minimum of 6 inches (152.4 mm) nominal in height. The backing shall be a minimum of 40 inches (1016 mm) in length.

Reinforcement installed at the side of the water closet shall be installed 32 inches to 38 inches (813mmto 965 mm) above the floor. The reinforcement shall be installed a maximum of 12 inches (305 mm) from the rear wall and shall extend a minimum of 26 inches (660 mm) in front of the water closet. The grab bar reinforcement shall be a minimum of 6 inches (152.4 mm) nominal in height.

- 3. Seat Height. The minimum height of water closet seats shall be 15 inches (381 mm) above the floor.
- 4. Water Closet Controls. Water closet controls shall be mounted no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5 pound-force (22.2 N).

1134A.8 Lavatories, vanities, mirrors and towel fixtures. Bathrooms or powder rooms required to be accessible shall have at least one accessible lavatory. Where mirrors and towel fixtures are provided, at least one of each shall be accessible.

- 1. Location. Vanities and lavatories shall be installed with the centerline of the fixture a minimum of 18 inches (457 mm) horizontally from an adjoining wall or fixture to allow for forward approach. When parallel approach is provided, lavatories shall be installed with the centerline of the fixture a minimum of 24 inches (610 mm) horizontally from an adjoining wall or fixture. The top of the fixture rim shall be a maximum of 34 inches (864 mm) above the finished floor.
- 2. **Floor Space.** A clear maneuvering space at least 30 inches by 48 inches (762 mm by 1219 mm) shall be provided at lavatories and shall be centered on the lavatory.
- 3. **Cabinets.** Cabinets under lavatories are acceptable-provided the bathroom has space to allow a parallel approach by a person in a wheelchair and the lavatory cabinets are designed with adaptable knee and toe space.

- 4. **Knee and toe space.** Knee and toe space shall be provided as follows:
  - 4.1. The knee space shall be at least 30 inches (762 mm) wide and 8 inches (203.2 mm) deep.
  - 4.2. The knee space shall be at least 29 inches (737 mm) high at the front face and reducing to not less than 27 inches (686 mm) at a point 8 inches (203.2 mm) back from the front edge.
  - 4.3. The knee and toe space required in this section shall be provided by one of the following:
    - 4.3.1. The space beneath the lavatory shall be left clear and unobstructed;
    - 4.3.2. Any cabinet beneath the lavatory shall be removable without the use of specialized knowledge or specialized tools; or
    - 4.3.3. Doors to the cabinet beneath the lavatory shall be removable or openable to provide the required unobstructed knee and toe space.
  - 4.4. The toe space required in this section shall be provided as follows:
    - 4.4.1. Shall be at least 30 inches (762 mm) wide and centered on the lavatory.
    - 4.4.2. Shall be at least 17 inches (432 mm) deep, measured from the front edge.
    - 4.4.3. Shall be at least 9 inches (228.6 mm) high from the floor.
- 5. Finished Floor. The finished floor beneath the lavatory shall be extended to the wall.
- 6. **Plumbing Protection.** Hot water and drain pipes exposed under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories.
- 7. **Lavatory Faucet Controls.** Faucet controls and operation mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist.

The force required to activate controls shall be no greater than 5 pound-force (22.2 N). Lever operated, push-type and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

8. **Mirrors and Towel Fixtures.** Where mirrors or towel fixtures are provided they shall be mounted with the bottom edge no higher than 40 inches (1016 mm) from the floor.

#### SECTION 1135A LAUNDRY ROOMS

**1135A.1 General.** If clothes washing machines and clothes dryers are provided in covered multifamily dwelling units, one of each type of appliance shall be provided. Where front-loading clothes washers are not provided, management shall provide assistive devices, on request of the occupant, to permit the use of top-loading clothes washers.

## SECTION 1136A ELECTRICAL RECEPTACLE, SWITCH AND CONTROL HEIGHTS

1136A.1 Receptacle heights. Electrical receptacle outlets on branch circuits of 30 amperes or less and communication system receptacles shall be located no more than 48 inches (1219 mm) measured from the top of the receptacle outlet box or receptacle housing nor less than 15 inches (381 mm) measured from the bottom of the receptacle outlet box or receptacle housing to the level of the finished floor or working platform. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height measured at the box is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Obstructions shall not extend more than 25 inches (635 mm) from the wall beneath the receptacle. Outlets that do not satisfy these specifications are acceptable, provided that comparable outlets, that perform the same functions, are provided within the same area and are accessible.

#### Exceptions:

- 1. Receptacle outlets installed as part of permanently installed baseboard heaters are exempt.
- 2. Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.
- Baseboard electrical outlets used in relocatable partitions, window walls or other electrical convenience floor outlets are not subject to the minimum height requirements.
- 4. This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

Note: The intent of the measurement is to ensure that receptacles fall within the reach range of 15 inches to 48 inches (381 to 1219 mm).

1136A.2 Switch and control heights. Controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances, alarms or cooling, heating and ventilating equipment shall be located no more than 48 inches (1219 mm) measured from the top of the outlet box nor less than 15 inches (381 mm) measured from the bottom of the outlet box to the level of the finished floor or working platform. If the reach is over a physical barrier or an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Physical barriers or obstructions shall not extend more than 25 inches (635 mm) from the wall beneath a control. Controls that do not satisfy these specifications are acceptable-provided that comparable controls or outlets, that perform the same functions, are provided within the same area and are accessible.

**Exception:** Appliances (e.g. kitchen stoves, dishwashers, range hoods, microwave ovens and similar appliances) which have controls located on the appliance.

## Division V – FEATURES COMMON TO EXTERIOR AND INTERIOR OF BUILDINGS

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## SECTION 1137A OTHER FEATURES AND FACILITIES

1137A.1 General. This division shall apply to features and facilities of common use areas on accessible floors or sites.

Note: The provisions in this division are not applicable to dwelling units.

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#### SECTION 1138A Reserved

## SECTION 1139A ACCESSIBLE DRINKING FOUNTAINS

**1139A.1 General.** Drinking fountains and water coolers in common use areas and/or sites shall comply with this section. A side approach drinking fountain is not acceptable.

1139A.2 Accessible route. Drinking fountains and water coolers shall be on an accessible route.

**1139A.3 Design and construction.** Wall-mounted and post-mounted cantilevered drinking fountains and water coolers shall be designed and constructed to comply with the following: (See Figure 11A-11A).

- 1. A clear floor space shall be provided in conformance with the following:
  - 1.1. A minimum clear floor space 30 inches by 48 inches (762mmby 1219 mm) to allow a person in a wheelchair to approach the unit facing forward.
  - 1.2. A clear knee space a minimum of 30 inches (762 mm) in width.
  - 1.3. A clear knee space a minimum of 18 inches (457 mm) in depth.
  - 1.4. A clear and unobstructed knee space under the drinking fountain not less than 27 inches (68 mm) in height and 8 inches (203.2 mm) in depth, the depth measurements being taken from the front edge of the fountain.
  - 1.5. A toe clearance of 9 inches (228.6 mm) in height above the floor and 17 inches (432 mm) in depth from the front edge of the fountain.
- 2. Water flow shall be provided in conformance with the following:

The spout shall be located within 6 inches (152.4 mm) of the front edge of the drinking fountain and within 36 inches (914 mm) of the floor.

A flow of water at least 4 inches (101.6 mm) high shall be available to allow the insertion of a cup or glass under the flow of water.

The water stream from the bubbler shall be substantially parallel to the front edge of the drinking fountain.

The force required to activate controls shall be no greater than 5 pound-force (22.2 N).

Manually operated or electronically operated controls shall be located within 6 inches (152.4 mm) of the front edge of the fountain.

1139A.3.1 Location. Water fountains shall be located completely within alcoves or otherwise positioned so as not to encroach into pedestrian ways. The alcove in which the water fountain is located shall not be less than 32 inches (813 mm) in width and 18 inches (457 mm) in depth. Protruding objects located in alcoves or otherwise positioned so as to limit encroachment into pedestrian ways are permitted to project 4 inches (102 mm) into walks, halls corridors, passageways or aisles. (See Figure 11A-11A).

**Exception:** When the enforcing agency determines that it would create an unreasonable hardship to locate the water fountain in an alcove, the water fountain may project into the path of travel, and the path of travel shall be identifiable to the blind as follows:

- 1. The surface of the path of travel at the water fountain shall be textured so that it is clearly identifiable by a blind person using a cane. The minimum textured area shall extend from the wall supporting the water fountain to 1 foot (305 mm) beyond the front edge of the water fountain and shall extend 1 foot (305mm) beyond each side of the water fountain, or
- Wing walls shall be provided on each side of the water fountain. The wing walls shall project out from the supporting wall at least as far as the water fountain to within 6 inches (152.4 mm) of the surface of the path of travel. There shall also be a minimum of 32 inches (813 mm) clear between the wing walls.

## SECTION 1140A ACCESSIBLE TELEPHONES

- **1140A.1 General.** If public telephones are provided, they shall comply with this section. On floors where public telephones are provided, at least one telephone shall be accessible. On any floor where two or more banks of multiple telephones are provided, at least one telephone in each bank shall be accessible.
- 1140A.2 Clear floor or ground space. A clear floor or ground space at least 30 inches by 48 inches (762mmby 1219 mm) that allows either a forward or parallel approach by a person using a wheelchair shall be provided at telephones. Bases, enclosures and fixed seats shall not impede approaches to telephones by people who use wheelchairs. (See Figure 11A-11B). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.
- **1140A.3 Relationship of maneuvering clearances to wheelchair spaces.** One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided.
- **1140A.4 Mounting height.** The highest operable part of the telephone shall be within the reach ranges specified in the Figure 11A-11B. Telephones mounted diagonally in a corner that require wheelchair users to reach diagonally shall have the highest operable part no higher than 54 inches (1372 mm) above the floor. (See Figure 11A-11B).
- **1140A.5 Enclosures.** If telephone enclosures are provided, they may overhang the clear floor space required in Sections 1140A.2 and 1140A.3 with the following limits:
  - 1. **Side Reach Possible.** The overhang shall be no greater than 19 inches (483 mm). The height of the lowest overhanging part shall be equal to or greater than 27 inches (686 mm) above the floor.
  - 2. **Full-height Enclosures.** Entrances to full-height enclosures shall be a minimum of 30 inches (762 mm) in width.

- 3. **Forward Reach Required.** If the overhang is greater than 12 inches (305 mm), then the clear width of the enclosure shall be 30 inches (762 mm) minimum; if the clear width of the enclosure is less than 30 inches (762 mm), then the height of the lowest overhanging part shall be equal to or greater than 27 inches (686 mm).
- 1140A.6 Equipment for hearing impaired people. Telephones shall be equipped with a receiver that generates a magnetic field in the area of the receiver cap. A reasonable number of the public telephones provided, but always at least one on each floor or in each bank, whichever is more, in a building or facility, shall be equipped with a volume control. Such telephones shall be capable of a minimum of 12 dbA and a maximum of 18 dbA above normal. If an automatic reset is provided, 18 dbA may be exceeded. Public telephones with volume control shall be hearing aid compatible and shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves. (See Figure 11A-11D).
- **1140A.7 Text telephones.** If a total of four or more public pay telephones are provided at the interior and exterior of a site, and if at least one of the total number provided is located in an interior location, at least one interior public text telephone shall be provided.
  - **1140A.7.1 Signage.** Text telephones shall be identified by the International TTY symbol (see Figure 11A-11C). If a facility has a public text telephone, directional signage indicating the location of the nearest such telephone shall be placed adjacent to all banks of telephones that do not contain a text telephone. Such directional signage shall include the International TTY symbol. If a facility has no banks of telephones, the directional signage shall be provided at the entrance or in a building directory.
- 1140A.8 Controls. Telephones shall have push-button controls where service for such equipment is available.
- 1140A.9 Cord length. The cord from the telephone to the handset shall be at least 29 inches (737 mm) long.
- **1140A.10 Telephone books.** If telephone books are provided, they shall be located in a position that complies with the reach ranges in Figures 11A-1I and 11A-1J.

## SECTION 1141A ACCESSIBLE SWIMMING POOLS

- **1141A.1 General.** Swimming pools in common use areas shall comply with the provisions of this section and Chapter 31B.
- **1141A.2 Swimming pool deck areas.** Swimming pool deck areas must be accessible, and a mechanism to assist persons with disabilities gain entry into the pool and exit from the pool shall be provided. Such a mechanism may consist of a swimming pool lift device as long as the device meets all of the following criteria:
  - 1. Has a seat that meets all of the following:
    - 1.1. The seat must be rigid;
    - 1.2. The seat must be not less than 17 inches (432 mm) and not more than 19 inches (483 mm), inclusive of any cushioned surface that might be provided, above the pool deck;
    - 1.3. The seat must have two armrests. The armrest on the side of the seat by which access is gained shall be either removable or fold clear of the seat;
    - 1.4. The seat must have a back support that is at least 12 inches (305 mm) tall; and
    - 1.5. The seat must have an occupant restraint for use by the occupant of the seat and the restraint must meet the standards for operable controls in compliance with Section 1127A.9.6.4.

- 2. Be capable of unassisted operation from both the deck and water levels.
- 3. Be stable and not permit unintended movement when a person is getting into or out of the seat.
- 4. Be designed to have a live-load capacity of not less than 300 pounds.
- 5. Be positioned so that, if the pool has water of different depths, it will place the operator into water that is at least 3 feet (914 mm) deep.
- 6. Be capable of lowering the operator at least 18 inches (457 mm) below the surface of the water.

## SECTION 1142A ELECTRICAL RECEPTACLE, SWITCH AND CONTROL HEIGHTS

1142A.1 Receptacle heights. Electrical receptacle outlets on branch circuits of 30 amperes or less and communication system receptacles shall be located no more than 48 inches (1219 mm) measured from the top of the receptacle outlet box or receptacle housing nor less than 15 inches (381 mm) measured from the bottom of the receptacle outlet box or receptacle housing to the level of the finished floor or working platform. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height measured at the box is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Obstructions shall not extend more than 25 inches (635 mm) from the wall beneath the receptacle. Outlets that do not satisfy these specifications are acceptable provided that comparable outlets, that perform the same functions, are provided within the same area and are accessible.

#### Exceptions:

- 1. Receptacle outlets installed as part of permanently installed baseboard heaters are exempt.
- 2. Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.
- 3. Baseboard electrical outlets used in relocatable partitions, window walls or other electrical convenience floor outlets are not subject to the minimum height requirements.
- 4. This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

Note: The intent of the measurement is to ensure that receptacles fall within the reach range of 15 inches to 48 inches.

1142A.2 Switch and control heights. Controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances, alarms or cooling, heating and ventilating equipment shall be located no more than 48 inches (1219 mm) measured from the top of the outlet box nor less than 15 inches (381 mm) measured from the bottom of the outlet box to the level of the finished floor or working platform. If the reach is over a physical barrier or an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Physical barriers or obstructions shall not extend more than 25 inches (635 mm) from the wall beneath a control. Controls that do not satisfy these specifications are acceptable provided that comparable controls or outlets, that perform the same functions, are provided within the same area and are accessible.

## SECTION 1143A SIGNAGE

1143A.1 General. When signs and/or identification devices are provided they shall comply with this section.

Exception: Signs need not be provided within dwelling units.

**1143A.2 Identification signs.** When signs identify permanent rooms and spaces of a building or site, they shall comply with Sections 1143A.5, 1143A.6, 1143A.8, 1143A.9 and 1143A.10.

Note: See Section 1124A for additional signage requirements applicable to elevators and Section 1127A.7 for sanitary facilities.

- **1143A.3 Direction and informational signs.** When signs direct to or give information about permanent rooms and spaces of a building or site, they shall comply with Sections 1143A.5, 1143A.6 and 1143A.7.
- **1143A.4 Accessibility signs.** When signs identify, direct or give information about accessible elements and features of a building or site, they shall include the appropriate symbol of accessibility and shall comply with Section 1143A.5 and, when applicable, Section 1143A.10.
- **1143A.5 Finish and contrast.** Characters, symbols and their background shall have a non glare finish. Characters and symbols shall contrast with their background, either light on a dark background or dark on a light background.
- **1143A.6 Proportions.** Characters on signs shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio of between 1:5 and 1:10.
- **1143A.7 Character height.** Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read. The minimum height is measured using an uppercase "X." Lowercase characters are permitted. For signs suspended or projected above the finish floor greater than 80 inches (2032 mm), the minimum character height shall be 3 inches (76 mm).
- **1143A.8 Raised characters and pictorial symbol signs.** When raised characters are required or when pictorial symbols (pictograms) are used on such signs, they shall conform to the following requirements:
  - 1. **Character Type.** Characters on signs shall be raised 1/32-inch (0.794 mm) minimum and shall be sans serif uppercase characters accompanied by Grade 2 Braille complying with Section 1143A.9.
  - 2. **Character Size.** Raised characters shall be a minimum of 5/8 inch (15.9 mm) and a maximum of 2 inches (51 mm) high.
  - 3. **Pictorial Symbol Signs (Pictograms).** Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. The outside dimension of the pictogram field shall be a minimum of 6 inches (152 mm) in height.
  - 4. **Character Placement.** Characters and Braille shall be in a horizontal format. Braille shall be placed a minimum of 3/8 inch (9.5 mm) and a maximum of ½ inch (12.7 mm) directly below the tactile characters, flush left or centered. When tactile text is multilined, all Braille shall be placed together below all lines of tactile text.
- **1143A.9 Braille.** Contracted Grade 2 Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be 1/10 inch (2.54 mm) on center in each cell with 2/10-inch (5.08 mm) space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch (0.635 mm) above the background. Braille dots shall be domed or rounded.
- **1143A.10 Mounting location and height.** Where permanent identification signs are provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side of the door. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right.

Where permanent identification signage is provided for rooms and spaces, it shall be located on the approach side of the door as one enters the room or space. Signs that identify exits shall be located on the same side of the door as the visual exit sign.

Mounting height shall be 60 inches (1524 mm) above the finish floor to the centerline of the sign. Mounting location shall be determined so that a person may approach within 3 inches (76 mm) of the signage without encountering protruding objects or standing within the swing of a door.

Note: See also Section 1127A.7 for additional signage requirements applicable to sanitary facilities.

SECTION 1144A

Reserved

**SECTION 1145A** 

Reserved

**SECTION 1146A** 

Reserved

**SECTION 1147A** 

Reserved

**SECTION 1148A** 

Reserved

**SECTION 1149A** 

Reserved

## Division VI — SITE IMPRACTICALITY TESTS

#### Division VI Table of Contents

Section 1150A Site Impracticality Tests
Test No. 1 Individual Building Test
Test No. 2 Site Analysis Test

Test No. 3 Unusual Characteristics Test

#### SECTION 1150A SITE IMPRACTICALITY TESTS

**1150A.1 General.** Covered multifamily dwellings in buildings without an elevator, located on sites with difficult terrain conditions or unusual characteristics, may employ the site impracticality tests in this division for determining the accessibility and adaptability provisions required by this chapter.

Except as provided for in Section 1102A.2, the provisions of this section do not apply to multistory dwelling units in nonelevator buildings, i.e., townhouses.

## SINGLE BUILDING WITH ONE COMMON (LOBBY) ENTRANCE

The following may only be used for determining required access to covered multifamily dwelling units, in a single building with one common (lobby) entrance, located on a site with difficult terrain conditions or unusual characteristics:

All ground-floor units in nonelevator buildings shall be adaptable and on an accessible route unless an accessible route to the common (lobby) entrance is not required as determined by Test No. 1, Individual Building Test, or Test No. 3. Unusual Characteristics Test, as described in this section.

Sites where either Test No. 1 or Test No. 3 is used and it is determined that an accessible route to the common (lobby) entrance is not required shall comply with the features listed in Section 1150A.2 unless exempted by Test No. 3, Unusual Characteristics Test.

Test No. 1—Individual Building Test may only be used if the site has terrain over 15 percent slope.

Test No. 3 —Unusual Characteristics Test may be used if applicable.

**Provisions to Test Nos. 1 and 2.** Where a building elevator is provided only as means of creating an accessible route to covered multifamily dwelling units on a ground floor, the building is not considered to be an elevator building for purposes of this code; hence, only the ground floor dwelling units would be covered.

#### TEST NO. 1—INDIVIDUAL BUILDING TEST

It is not required by this code to provide an accessible route when the terrain of the site is such that both of the following apply:

- 1. The slopes of the undisturbed site measured between the planned entrance and all vehicular or pedestrian planned entrance exceed 15 percent; and 2. The slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance also exceed 15 percent. and
- The slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance also exceed 15 percent.

If there are no vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance, the slope for the purposes of Test No. 1 will be measured to the closest vehicular or pedestrian arrival point.

For purposes of these requirements, vehicular or pedestrian arrival points include public or resident parking areas, public transportation stops, passenger loading zones and public streets or sidewalks. To determine site impracticality, the slope would be measured at ground level from the point of the planned entrance on a straight line to (1) each vehicular or pedestrian arrival point that is within 50 feet (15 240 mm) of the planned entrance, or (2) if there are no vehicular or pedestrian arrival points within the specified area, the vehicular or pedestrian arrival point closest to the planned entrance. In the case of sidewalks, the closest point to the entrance will be where a public sidewalk entering the site intersects with the walk to the entrance. In the case of resident parking areas, the closest point to the planned entrance will be measured from the entry point to the parking area that is located closest to the planned entrance.

#### TEST NO. 2—SITE ANALYSIS TEST

For a site having multiple buildings, or a site with a single building with multiple entrances, it is not required to provide an accessible route to all ground floor units under the following conditions:

- Calculate the percentage of the total buildable area of the undisturbed site with a natural grade less than 10-percent slope. The analysis of the existing slope (before grading) shall be done on a topographic survey with 2-foot (610 mm) contour intervals with slope determination made between each successive interval. The accuracy of the slope analysis shall be certified by a licensed engineer, landscape architect, architect or surveyor.
- 2. Determine the requirement of providing an accessible route to planned multifamily dwellings based on the topography of the existing natural terrain. The minimum percentage of ground-floor units required on an accessible route shall equal the percentage of the total buildable area (not restricted-use areas) of the undisturbed site with an existing natural grade of less than 10-percent slope. In no case shall less than 20 percent of the ground floor dwelling units be on an accessible route and comply with the provisions of Division IV.
- 3. In addition to the percentage established in paragraph (2), all additional ground floor units in a building, or ground floor units served by a particular entrance, that fall within an 8.33-percent slope between their planned entrances and an arrival point shall be on an accessible route and comply with the provisions of Division IV.
- 4. All additional ground floor units in a building, or ground floor units served by a particular entrance, not on an accessible route shall comply with the features listed in Section 1150A.2.

## TEST NO. 3—UNUSUAL CHARACTERISTICS TEST

Unusual characteristics include sites located in a federally designated floodplain or coastal high-hazard areas and sites subject to other similar requirements of law or code that require the lowest floor or the lowest structural member of the lowest floor to be designed to a specified level at or above the base flood elevation. An accessible route to a building entrance is impractical due to unusual characteristics of the site when:

- The original site characteristics result in a difference in finished grade elevation exceeding 30 inches (762 mm) and 10 percent measured between an entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance; or
- 2. If there are no vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance, the unusual characteristics result in a difference in finished grade elevation exceeding 30 inches (762 mm) and 10 percent measured between an entrance and the closest vehicular or pedestrian arrival point.

1150A.2 Additional requirements for Section 1150A.

All other ground floor dwelling units in nonelevator buildings shall be made to comply with the following requirements:

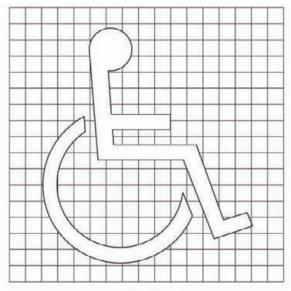
1. Grab bar reinforcement: see Section 1134A.

- 2. Thirty-two inch (813 mm) clear door interior opening width: see Section 1132A.3.
- 3. Lever hardware: see Section 1132A.8.
- 4. Door signal devices: see Section 1132A.10.
- 5. Clear space by doors: see Chapters 10 and 11A.
- 6. Minimum 15-inch (381 mm) water closet seat height: see Section 1134A.7, Item 3.
- 7. Electrical receptacle outlet height: see Section 1136A.
- 8. Lighting and environmental control height: see Section 1136A.
- 9. Faucet controls: see Section 1134A.8, Item 7.
- 10. Water closet, bathtub and lavatory minimum space requirements: see Section 1134A.
- 11. Removable cabinets under the kitchen sink counter area: see Section 1133A.3.

<u>DIVISION VII – FIGURES</u>

11A-1A through 11A-11E

HOUSING ACCESSIBILITY



(a) SYMBOL PROPORTIONS



( b ) DISPLAY CONDITIONS

FIGURE 11A-1A—INTERNATIONAL ACCESSIBILITY SYMBOL

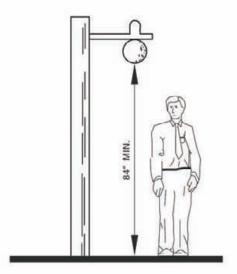
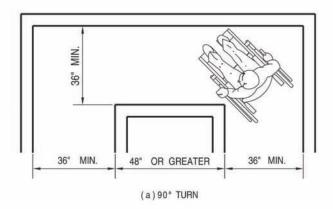


FIGURE 11A-1B—OVERHANGING OBSTRUCTION



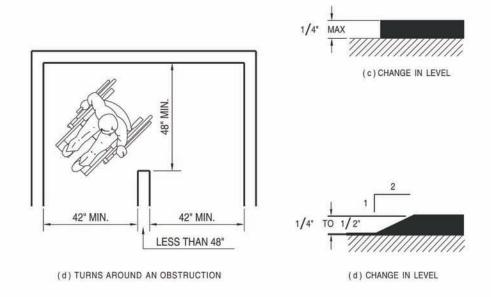


FIGURE 11A-1C—WIDTH OF ACCESSIBLE ROUTE

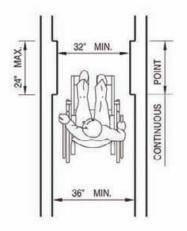


FIGURE 11A-1E—MINIMUM CLEAR WIDTH FOR SINGLE WHEELCHAIR

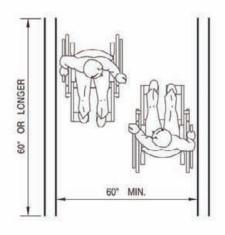
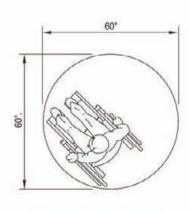
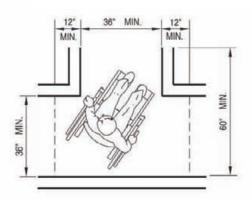


FIGURE 11A-1D—MINIMUM CLEAR WIDTH FOR TWO WHEELCHAIRS

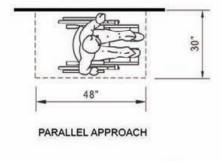


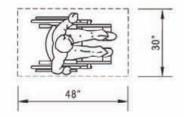
(a) 60 INCHES DIAMETER SPACE



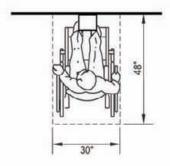
(b) T-SHAPED SPACE FOR 180° TURNS

FIGURE 11A-1D—WHEELCHAIR TURNING SPACE



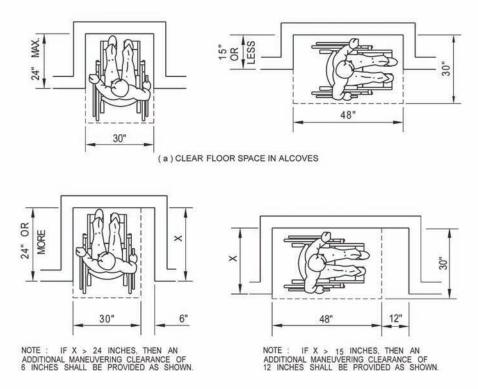


CLEAR FLOOR SPACE



FORWARD APPROACH

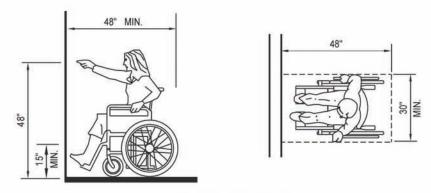
FIGURE 11A-1G—MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS



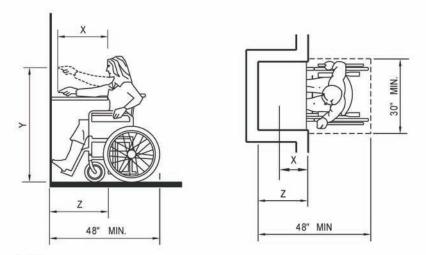
(b) ADDITIONAL MANEUVERING CLEARANCE FOR ALCOVES

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11A-1H—MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS



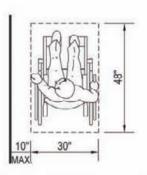
(a) HIGH FORWARD REACH LIMIT



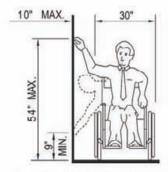
NOTE: X SHALL BE LESS THAN OR EQUAL TO 25 INCHES Z SHALL BE GREATER THAN OR EQUAL TO X. WHEN X IS LESS THAN 20 INCHES, THEN Y SHALL BE 48 INCHES MAXIMUM. WHEN X IS 20 TO 25 INCHES, THEN Y SHALL BE 44 INCHES MAXIMUM.

( b ) MAXIMUM FORWARD REACH OVER AN OBSTRUCTION

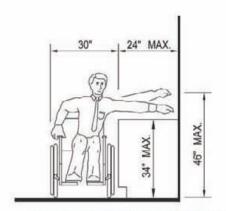
FIGURE 11A-1I—FORWARD REACH



(a) CLEAR FLOOR SPACE PARALLEL APPROACH

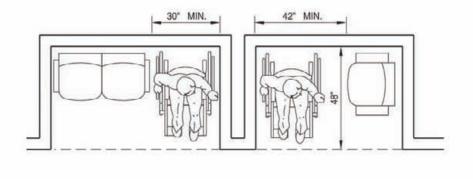


(b) HIGH AND LOW SIDE REACH LIMITS



(c) MAXIMUM SIDE REACH OVER OBSTRUCTION

FIGURE 11A-1J—SIDE REACH





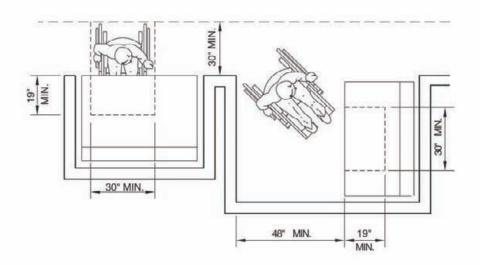
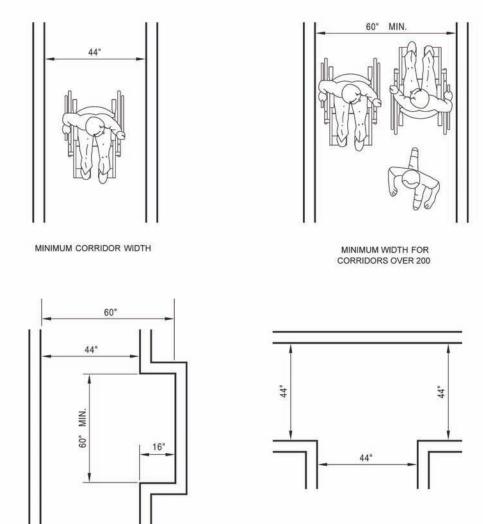


FIGURE 11A-1K—MINIMUM CLEARANCES FOR SEATING AND TABLE



PASSING ALCOVES FOR CORRIDORS OVER 200' IN LIEU OF 60" MIN. WIDTH

FIGURE 11A-1L—CORRIDOR OVER 200 FEET (60 960 mm)

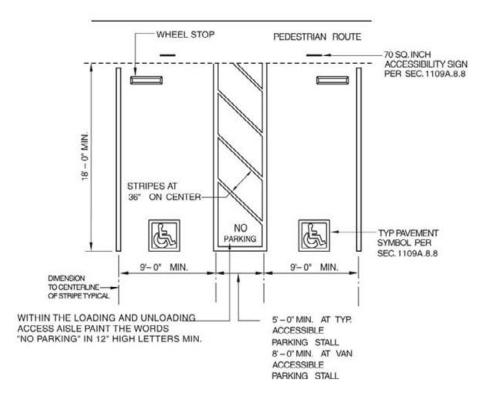


FIGURE 11A-2A—DOUBLE PARKING STALLS

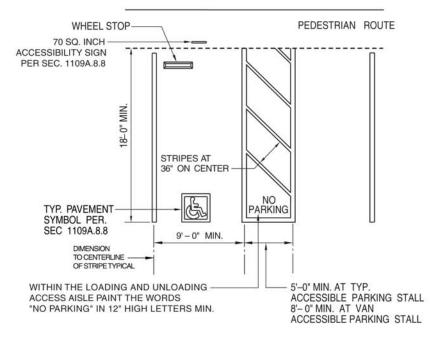


FIGURE 11A-2B—DIAGONAL PARKING STALLS

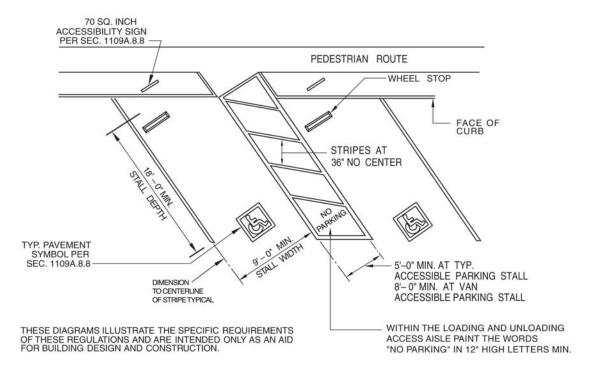
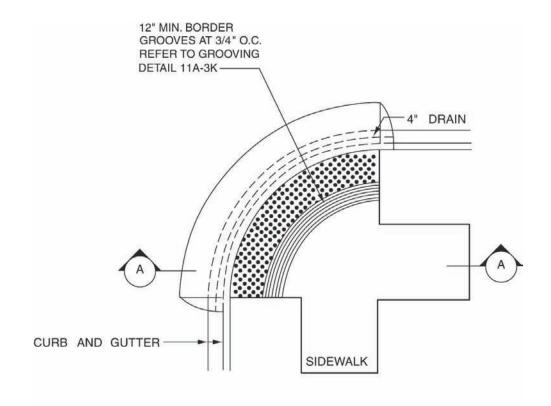
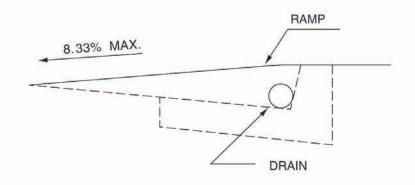


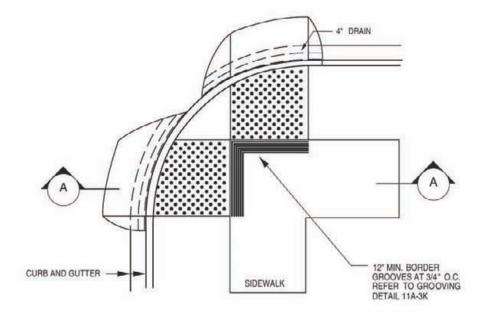
FIGURE 11A-2C—DIAGONAL PARKING STALLS





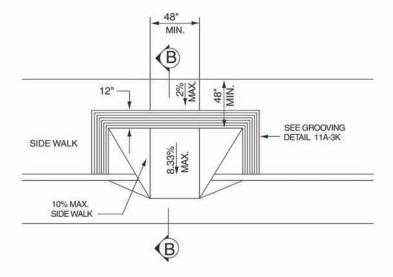
SECTION A-A

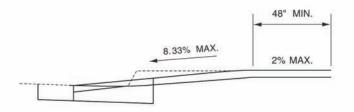
FIGURE 11A-3A—CURB DETAILS



SEE FIGURE 11B-19A

FIGURE 11A-3B—CURB DETAIL





SECTION B-B

FIGURE 11A-3C—CURB DETAIL

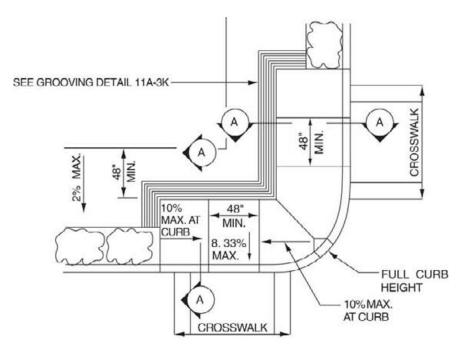
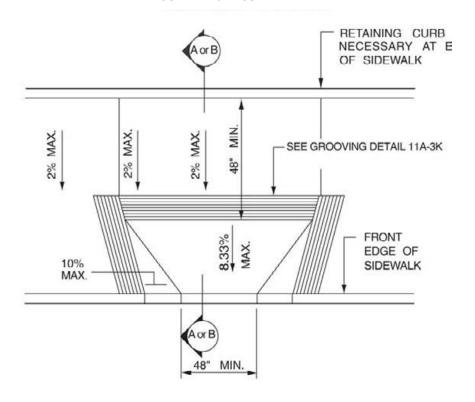


FIGURE 11A-3D—CURB DETAIL



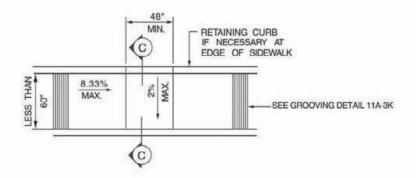


FIGURE 11A-3F—CURB DETAIL

## SIDEWALK LESS THAN 60° WIDE

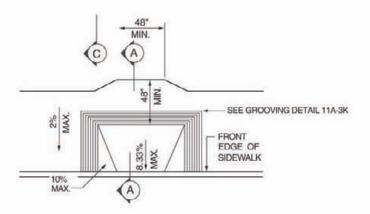


FIGURE 11A-3G—CURB DETAIL

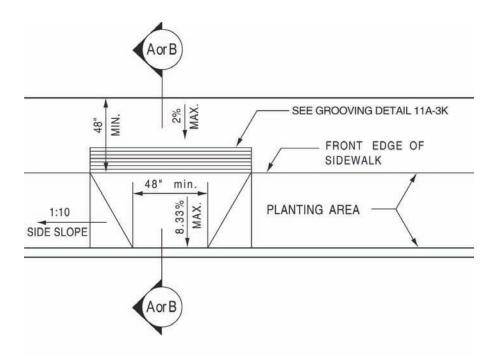
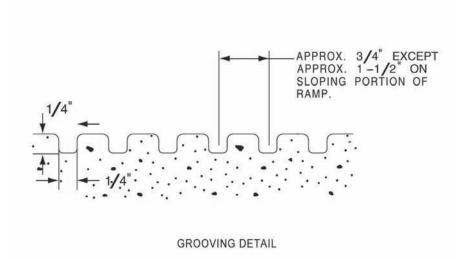


FIGURE 11A-3J—CURB DETAIL



THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-3K—CURB DETAIL

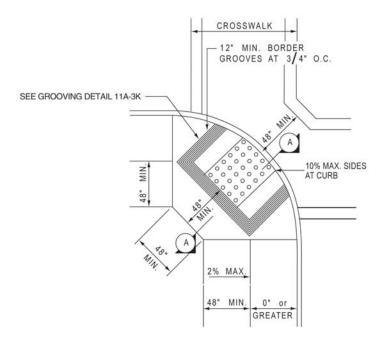


FIGURE 11A-3H—CURB DETAIL

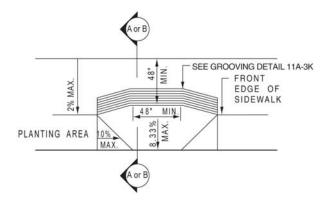
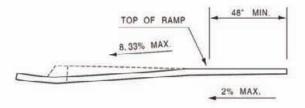
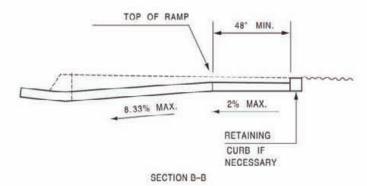


FIGURE 11A-3I—CURB DETAIL



SECTION A-A



DEPRESS ENTIRE SIDEWALK AS REQUIRED

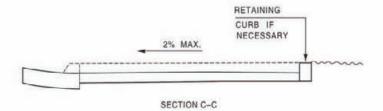
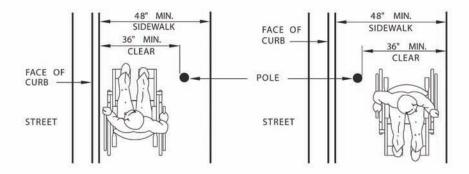


FIGURE 11A-3M - RETURNED CURB STYLE (See Figure 11B-21)

FIGURE 11A-3N - TRUNCATED DOMES (See Figure 11B-23A)

FIGURE 11A-3—(RESERVED)



#### (a) SIDEWALK OBSTRUCTIONS

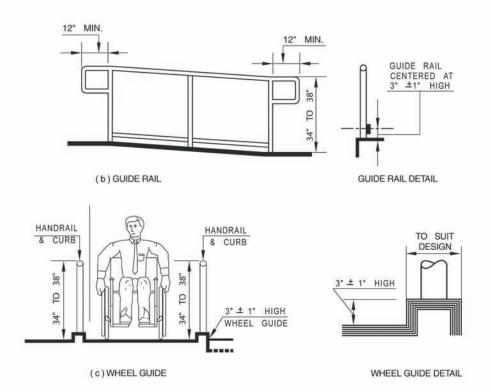
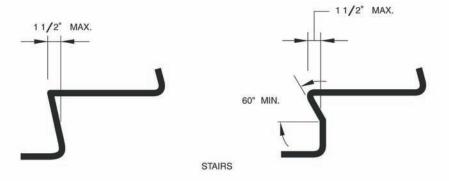


FIGURE 11A-5A—RAMPS AND SIDEWALKS



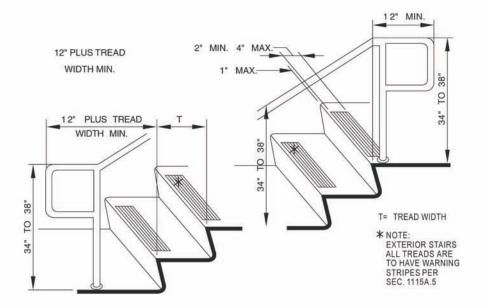


FIGURE 11A-6A—WARNING STRIPING AND HANDRAIL EXTENSIONS

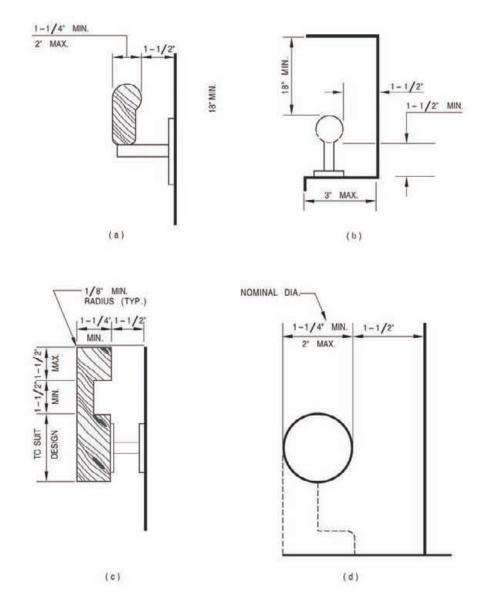
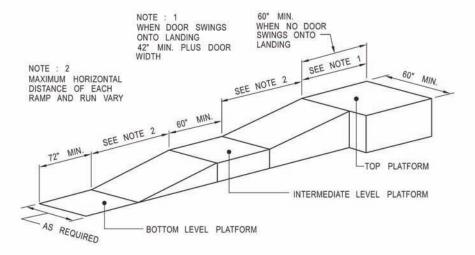
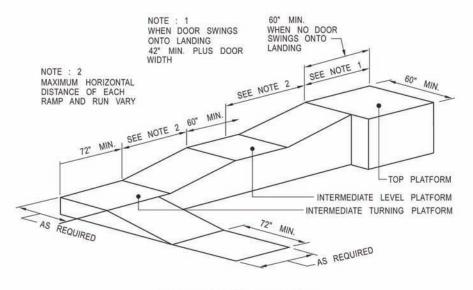


FIGURE 11A-6B—STAIR HANDRAILS

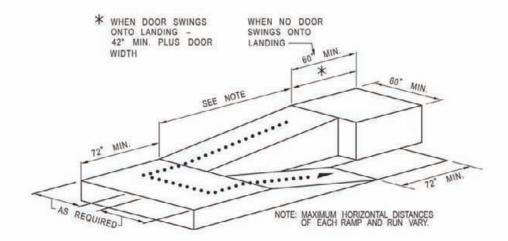


#### (a) STRAIGHT RAMP RUN

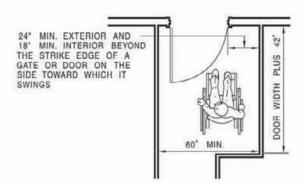


(b) RAMP WITH TURNING PLATFORM

FIGURE 11A-6C—RAMP DIMENSIONS



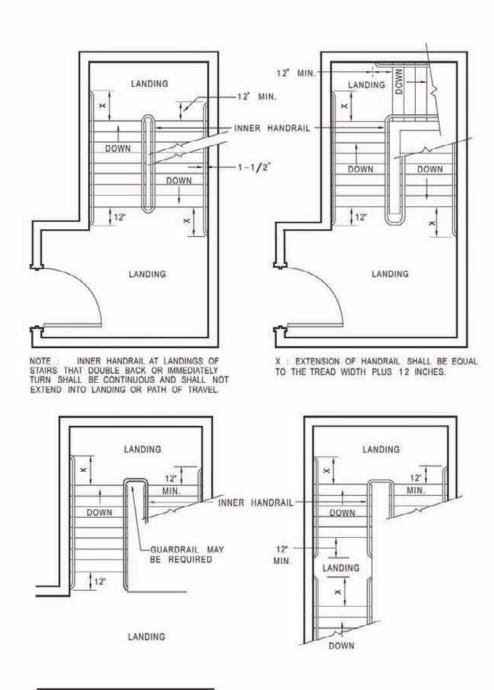
#### ( a ) RAMP WITH INTERMEDIATE SWITCH BACK PLATFORM



(b) RAMP LANDING AT DOORWAY

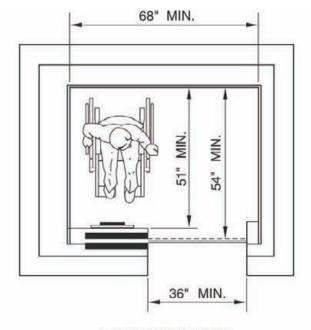
THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION,

FIGURE 11A-6D—RAMP LANDING AND DOORWAY

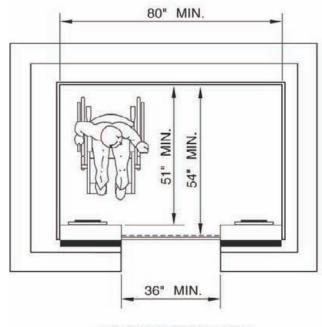


THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-6E—STAIR HANDRAILS



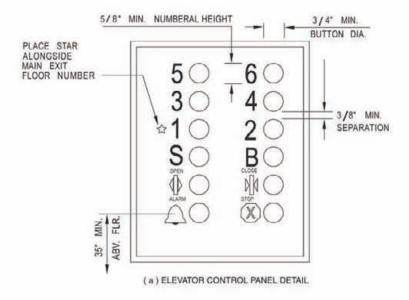
(a) SIDE OPENING DOOR

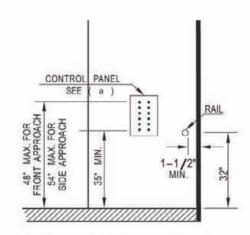


(b) CENTER OPENING DOOR

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11A-7A—MINIMUM DIMENSIONS OF ELEVATOR CARS

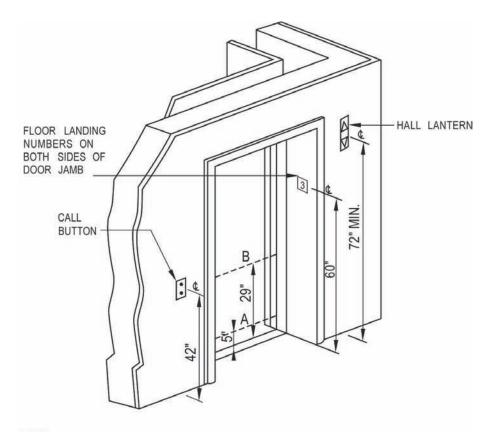




( b ) MAXIMUM INSTALLATION HEIGHTS ABOVE CAB FLOOR

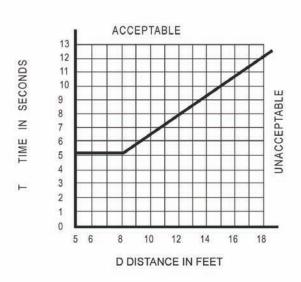
THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-7B—ELEVATOR CONTROL PANEL



NOTE: THE AUTOMATIC DOOR REOPENING DEVICE IS ACTIVATED IF AN OBJECT PASSES THROUGH EITHER LINEA OR LINE B. LINE A AND LINE B REPRESENT THE VERTICAL LOCATION OF THE DOOR REOPENING DEVICE NOT REQUIRING CONTACT.

#### FIGURE 11A-7C—HOISTWAY AND ELEVATOR ENTRANCES



THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-7D—GRAPH OF TIMING EQUATION

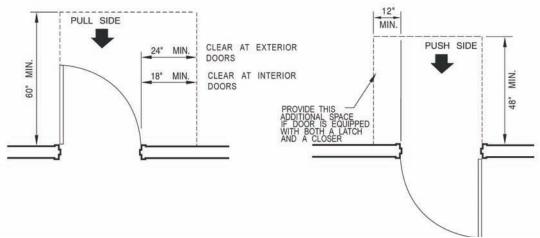
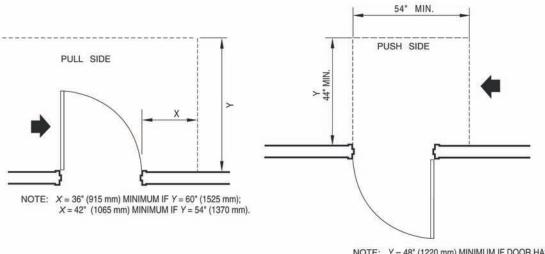


FIGURE 11A-8A—FRONT APPROACHES—SWINGING DOORS



NOTE: Y = 48" (1220 mm) MINIMUM IF DOOR HAS BOTH A LATCH AND A CLOSER.

FIGURE 11A-8B—HINGE-SIDE APPROACHES—SWINGING DOORS

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

LEVEL MANEUVERING CLEARANCE AT DOORS

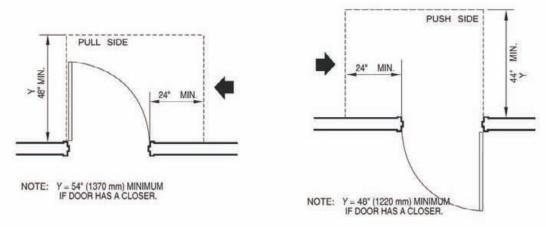


FIGURE 11A-8C—LATCH-SIDE APPROACHES—SWINGING DOORS

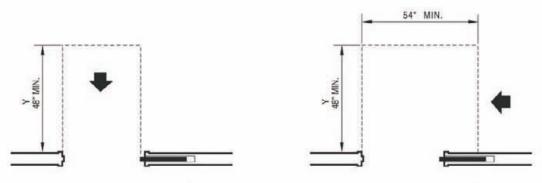


FIGURE 11A-8D—FRONT APPROACH—SLIDING DOORS AND FOLDING DOORS

FIGURE 11A-8E—SLIDE SIDE APPROACH—SLIDING DOORS AND FOLDING DOORS

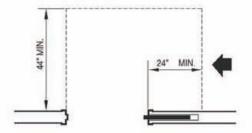
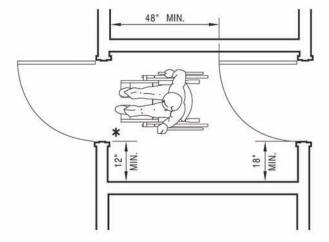


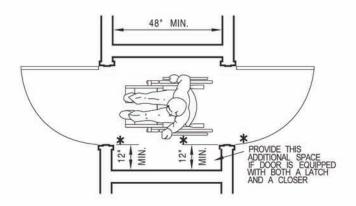
FIGURE 11A-8F—LATCH SIDE APPROACH—SLIDING DOORS
AND FOLDING DOORS

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

LEVEL MANEUVERING CLEARANCE AT DOORS (Continued)



(a) DOOR IN SERIES

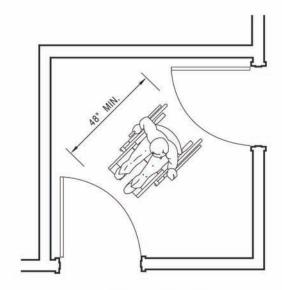


(b) BOTH DOORS OPEN OUT

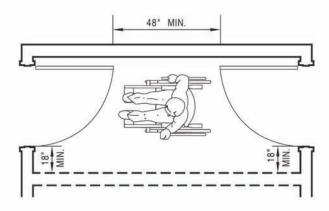
(SERVING OTHER THAN A REQUIRED EXIT STAIRWAY)

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-8G—VESTIBULE



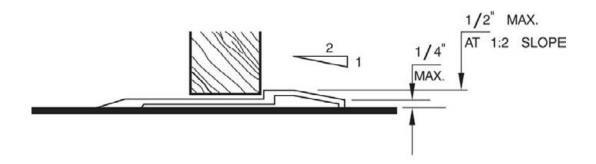
(a) DOORS AT ADJACENT WALLS



(b) DOORS AT OPPOSITE WALLS

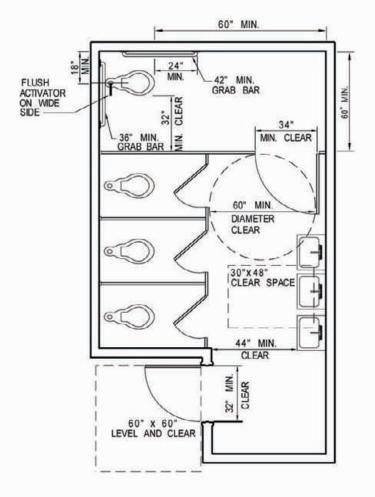
THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-8H—VESTIBULE (SERVING OTHER THAN A REQUIRED EXIT STAIRWAY)



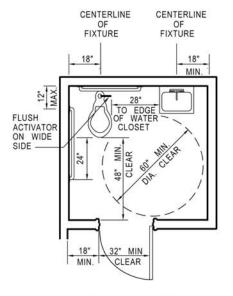
THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

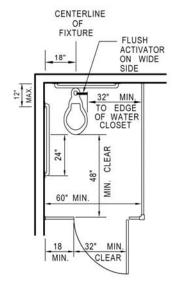
FIGURE 11A-8I—THRESHOLDS



THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

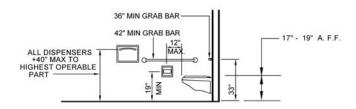
FIGURE 11A-9A—MULTIPLE ACCOMMODATION TOILET FACILITY





SINGLE-ACCOMMODATION TOILET FACILITY

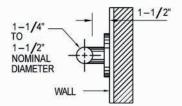
ACCESSIBLE WATER CLOSET COMPARTMENT WITHIN A MULTIPLE-ACCOMMODATION TOILET FACILITY



SIDE ELEVATION

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

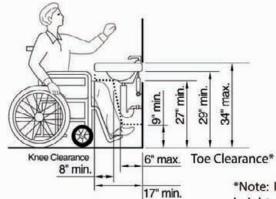
FIGURE 11A-9B



SECTION THROUGH TYPICAL GRAB BAR

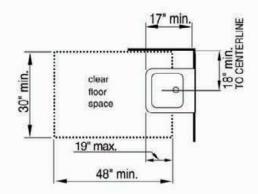
THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11A-9C—GRAB BAR SECTION



# SIDE ELEVATION

\*Note: If a minimum 9 inches height of toe clearance is provided, a maximum of 6 inches of the 48 inches of clear floor space required at the fixture may extend into the toe space.

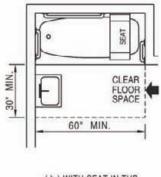


# **PLAN VIEW**

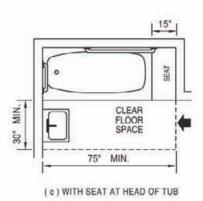
THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-9D—KNEE CLEARANCE



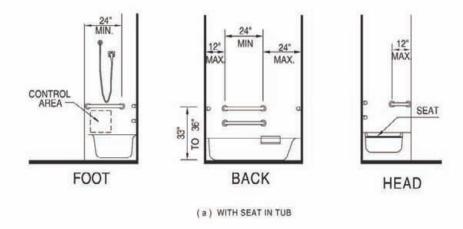


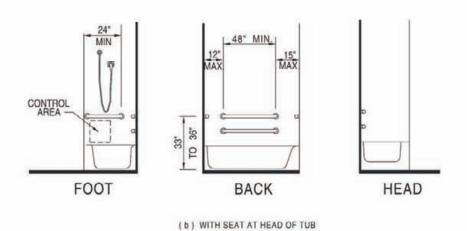
( b ) WITH SEAT IN TUB



THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION,

FIGURE 11A-9E—CLEAR FLOOR SPACE AT BATHTUBS



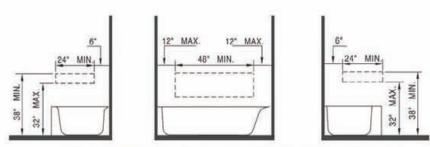


THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-9F—GRAB BARS AT BATHTUBS

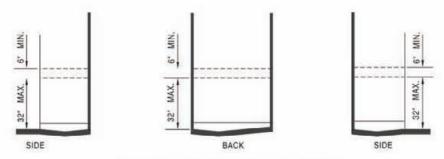


#### (a) WATER CLOSET IN ADAPTABLE BATHROOMS



NOTE: THE AREA OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE INSTALLATION OF GRAB BARS FOR TYP. FIXTURE CONFIGURATIONS

#### (b) LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE BATHTUBS



NOTE: THE AREA OUTLINED IN DASHED LINES REPRESENT LOCATION FOR FUTURE INSTALLATION OF GRAB BARS

#### (a) LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE SHOWERS

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

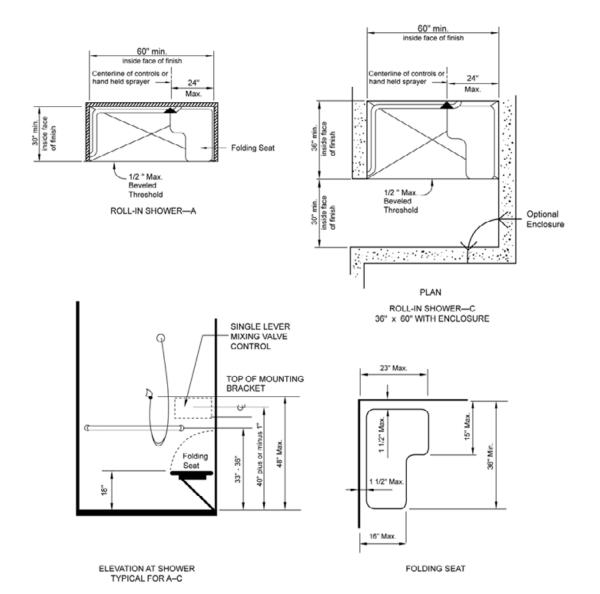
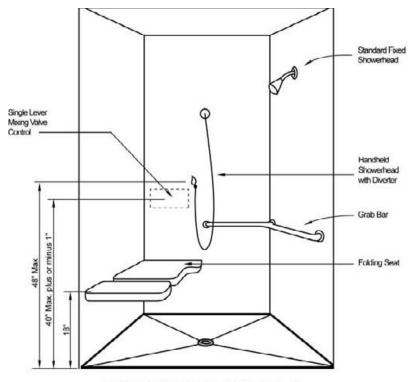


FIGURE 11A-9H—ROLL-IN SHOWER



PERSPECTIVE OF ROLL-IN SHOWER—B 42" x 48" CALIFORNIA SIZE

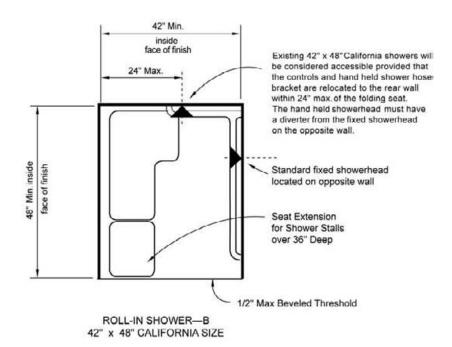
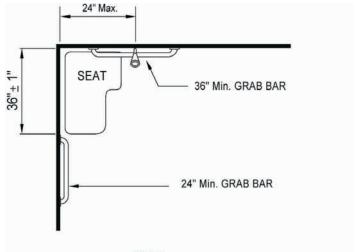
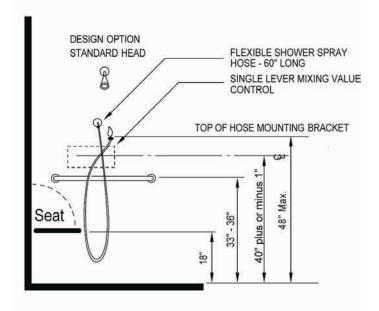


FIGURE 11A-9I—ROLL-IN SHOWER



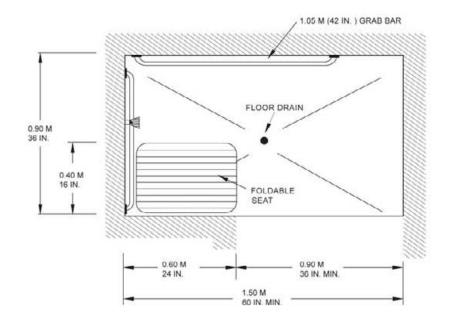
**PLAN** 



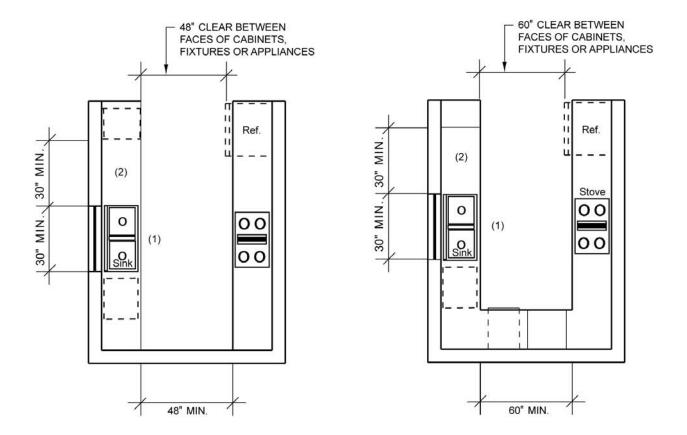
**ELEVATION** 

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11A-9J—OPEN SHOWER



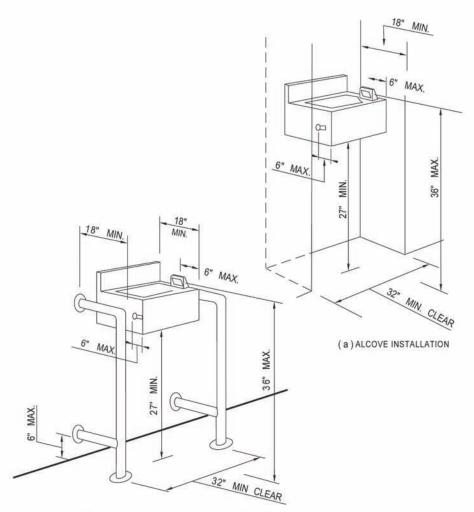
THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.



TYPICAL KITCHEN

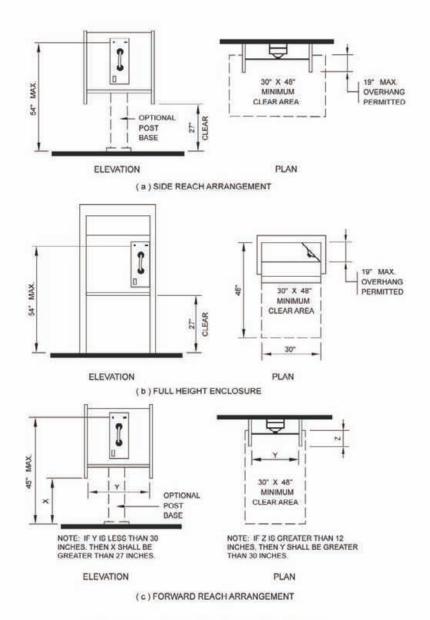
"U" SHAPED KITCHEN

- (1) (2) (3) (4) 30-inch wide counter top space for sink installation with removable base cabinet and finish flooring beneath sink
- 30-inch wide counter top workspace
- 30-inch by 48-inch clear space adjacent to range or cooktop to allow parallel approach
- 30-inch by 48-inch either parallel approach at oven, dishwasher, trash compactor or refrigerator



(b) NONALCOVE WING WALL INSTALLATION

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION



THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11A-11B—MOUNTING HEIGHTS AND CLEARANCES FOR TELEPHONES



FIGURE 11A-11C—INTERNATIONAL TTY SYMBOL



FIGURE 11A-11D—VOLUME CONTROL TELEPHONES



FIGURE 11A-11E—INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

# CALIFORNIA BUILDING CODE -- MATRIX ADOPTION TABLE CHAPTER 11B — ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS, COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING

Adopting Agency		B S C	S F M	HCD		DSA		OSHPD			C S A	DHS	A G R	D W R	Ε	C A	S L	S L C	
Adapt Entire Colifornia Chanter				1	2	1/AC	AC	SS	1	2	3 4								
Adopt Entire California Chapter																			
Adopt entire California Chapter as amended (amended sections listed below)							Х												
Adopt only those sections that are listed below			Χ																
Chapter / Section	Codes																		
1114B.2 – 1114B.2.1	CA		Χ																

# **Division I - NEW BUILDINGS**

#### SECTION 1101B SCOPE

See Chapter 1, Section 109.1.

**1101B.1 General.** Buildings or portions of buildings shall be accessible to persons with disabilities as required by this chapter.

**1101B.2 Design.** The design and construction of accessible building elements shall be in accordance with this chapter and Section 1114B.1.1.

# 1101B.3 Maintenance of accessible features.

- 1. A public accommodation shall maintain in operable working condition those features of facilities and equipment that are required to be accessible to and usable by persons with disabilities.
- 2. This section does not prohibit isolated or temporary interruptions in service or access due to maintenance or repairs.

1101B.4 Dimension conventions. Dimensions that are not stated as "maximum" or "minimum" are absolute.

**1101B.5 Construction and manufacturing tolerances.** All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points.

# 1101B.6 Commercial facilities located in private residences.

- When a commercial facility is located in a private residence, the portion of the residence used exclusively
  as a residence is not covered by this chapter, except as required by Section 1111B.5, but that portion
  used both for the commercial facility and for residential purposes is covered by the new construction and
  alterations requirements of this code.
- The portion of the residence covered extends to those elements used to enter the commercial facility, including the homeowner's front sidewalk, if any, the door or entryway, and hallways; and those portions of the residence, interior or exterior, available to or used by employees or visitors of the commercial facility, including sanitary facilities.

# SECTION 1102B DEFINITIONS

For additional definitions pertinent to the Division of the State Architect-Access Compliance accessibility requirements, see Chapter 2, Section 202.

For the purpose of the chapter, certain terms are defined as follows:

**ACCESS AISLE** is an accessible pedestrian space adjacent to or between parking spaces that provides clearances in conformance with this chapter.

**ACCESSIBILITY** is the combination of various elements in a building, facility, site, or area, or portion thereof which allows access, circulation and the full use of the building and facilities by persons with disabilities in conformance with this chapter.

**ACCESSIBLE** is approachable and usable by persons with disabilities in compliance with this code.

**ACCESSIBLE ELEMENT** is an element specified by the regulations adopted by the Division of the State Architect-Access Compliance.

ACCESSIBLE MEANS OF EGRESS. See Section 1002.1.

ACCESSIBLE ROUTE OF TRAVEL is a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person with a disability using a wheelchair and that is also safe for and usable by persons with other disabilities, and that is consistent with the definition of "path of travel" in this section. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, sidewalks, ramps, and lifts. An accessible route does not include stairs, steps, or escalators.

**ACCESSIBLE SPACE** is a space that complies with the regulations adopted by the Division of the State Architect-Access Compliance.

ADAPTABILITY refers to the capability of spaces or facilities to be readily modified and made accessible.

**ADMINISTRATIVE AUTHORITY** is a governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.

**AISLE** is a circulation path between objects such as seats, tables, merchandise, equipment, displays, shelves, desks, etc. that provides clearances in conformance with this chapter.

**AISLE, EMPLOYEE AREAS** (as required for architectural accessibility) is a space that serves as a passage-way, which is created by architectural components such as walls, fixed cabinetry or fixtures and not moveable components such as furniture.

AREA OF REFUGE. See Section 1002.1.

**ASSEMBLY AREA** is a room or space accommodating a group of individuals for recreational, educational, political, social, or amusement purposes, or for the consumption of food and drink.

**AUTOMATIC DOOR** is a door equipped with a power operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat or manual switch.

**CIRCULATION PATH** is an exterior or interior way of passage from one place to another for pedestrians, including, but not limited to, walks, hallways, courtyards, stairways and stair landings.

CLEAR means unobstructed.

**CLEAR FLOOR SPACE** is the minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

**CLOSED-CIRCUIT TELEPHONE** is a telephone with dedicated line(s) such as a house phone, courtesy phone or phone that must be used to gain entrance to a facility.

**COMMON USE AREAS** are those interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (for example, occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants).

CROSS SLOPE is the slope that is perpendicular to the direction of travel (as differentiated from running slope).

**CURB CUT** is an interruption of a curb at a pedestrian way, which separates surfaces that are substantially at the same elevation.

**CURB RAMP** is a sloping pedestrian way, intended for pedestrian traffic, which provides access between a walk or sidewalk to a surface located above or below an adjacent curb face.

**DETECTABLE WARNING** is a standardized surface or feature built into or applied to walking surfaces or other elements to warn visually impaired persons of hazards in the path of travel. Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR). Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**DWELLING UNIT** is a single unit of residence for a family of one or more persons. Examples of dwelling units covered by this chapter include condominiums, an apartment unit within an apartment building, and other types of dwellings in which sleeping accommodations are provided but toileting or cooking facilities are shared by occupants of more than one room or portion of the dwelling. Examples of the latter include dormitory rooms and sleeping accommodations in shelters intended for occupancy as residences for homeless persons.

**ELEMENT** is an architectural or mechanical component of a building, facility, space, or site, for example, a telephone, curb ramp, door, drinking fountain, seating, or water closet.

ELEVATOR, PASSENGER is an elevator used primarily to carry passengers.

**ENTRANCE** means any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibules if provided, the entry door(s) or gate(s), and the hardware of the entry door(s) or gate(s).

**EQUIVALENT FACILITATION** is an alternate means of complying with the literal requirements of these standards and specifications that provides access in terms of the purpose of these standards and specifications. See Section 109.1.

In determining equivalent facilitation, consideration shall be given to means that provide for the maximum independence of persons with disabilities while presenting the least risk of harm, injury or other hazard to such persons or others.

EXIT. See Section 1002.1.

**FACILITY (or FACILITIES)** is a building, structure, room, site, complex or any portion thereof, that is built, altered, improved or developed to serve a particular purpose. Facilities shall include all or any portion of buildings, structures, site developments, complexes, equipment, roads, walks, sidewalks, passageways, parking lots, or other real or personal property located on a site.

GRAB BAR is a bar for the purpose of being grasped by the hand for support.

GUARD (or GUARDRAIL). See Section 1002.1.

HANDRAIL. See Section 1002.1.

**HEALTH CARE PROVIDER.** See "Professional Office of a Health Care Provider".

INDEPENDENT ENTITY. See Section 202.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect—Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY** is that symbol adopted by Rehabilitation International's 11<sup>th</sup> World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities. See Figure 11B-6.

**KICK PLATE** is an abrasion-resistant plate affixed to the bottom portion of a door to prevent a trap condition and protect its surface.

**LEVEL AREA** is a specified surface that does not have a slope in any direction exceeding 1/4 inch (6.4 mm) in 1 foot (305 mm) from the horizontal (2.083 percent gradient).

LIFT, SPECIAL ACCESS. See "Special Access Lift."

MARKED CROSSING is a crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

NEWLY CONSTRUCTED. See Chapter 11A, Section 1107A.14-N.

NOSE, NOSING, is that portion of a tread projecting beyond the face of the riser immediately below.

**OPEN RISER** is the air space between tread projecting beyond the face of the riser immediately below.

**OPERABLE PART** is a part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate or adjust the equipment or appliance (for example, coin slot, pushbutton, handle).

PASSAGE DOOR is a door other than an exit door through which persons may traverse.

**PATH OF TRAVEL** is a passage that may consist of walks and sidewalks, curb ramps and pedestrian ramps, lobbies and corridors, elevators, other improved areas, or a necessary combination thereof, that provides free and unobstructed access to and egress from a particular area or location for pedestrians and/or wheelchair users. A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which a particular area may be approached, entered, and exited, and which connects a particular area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility. In existing buildings, when alterations, structural repairs or additions are made, the term "path of travel" also includes the sanitary facilities, telephones, drinking fountains, and signs serving the altered area.

**PEDESTRIAN** is an individual who moves in walking areas with or without the use of walking assistive devices such as crutches, leg braces, wheelchairs, white cane, service animal, etc.

**PEDESTRIAN GRADE SEPARATION** is a structure erected over or under an obstacle such as a freeway, roadway, street, railroad, stream, etc., and intended primarily for pedestrian use.

**PEDESTRIAN RAMP** is a walking surface which has a running slope greater than 1:20 intended for pedestrian traffic and as differentiated from a curb ramp.

PEDESTRIAN WAY is a route by which a pedestrian may pass.

PLATFORM. See Section 410.2.

PRIMARY ENTRY LEVEL is the floor or level of the building on which the primary entry is located.

**PROFESSIONAL OFFICE OF A HEALTH CARE PROVIDER** is a location where a person or entity, regulated by the State to provide professional services related to the physical or mental health of an individual, makes such services available to the public. The facility housing the "professional office of a health care provider" only includes floor levels housing at least one health care provider, or any floor level designed or intended for use by at least one health care provider.

**PUBLIC USE AREA** means interior or exterior rooms or spaces of a building that are made available to the general public and does not include common use areas. Public use areas may be provided at a building that is privately or publicly owned.

PUBLIC WAY. See Section 1002.1.

RAIL TRANSIT BOARDING PLATFORM. See "Transit Boarding Platform".

RISER is the vertical distance from the top of the tread to the top of the next higher tread.

RUNNING SLOPE is the slope that is parallel to the direction of travel (as differentiated from cross slope).

**SHOPPING CENTER (or SHOPPING MALL)** is one or more sales or rental establishments or stores. A shopping center may include a series of buildings on a common site, connected by a common pedestrian access route on, above or below the ground floor, that is either under common ownership or common control or developed either as one project or as a series of related projects. For the purposes of this section, shopping center or shopping mall includes a covered mall building.

SIDEWALK. See Section 202.

**SLEEPING ACCOMMODATIONS** are rooms in which people may sleep; for example, dormitory and hotel or motel quest rooms or suites.

**SPECIAL ACCESS LIFT** is a hoisting and lowering mechanism equipped with a car or platform or support that serves two landings of a building or structure and is designed to carry a passenger or passengers and (or) luggage or other material a vertical distance as may be allowed.

**SPECIFIED PUBLIC TRANSPORTATION** is transportation by bus, rail, or any other conveyance (other than by aircraft) that provides the general public with general or special service (including charter service) on a regular and continuing basis.

STAGE. See Section 410.2.

STAIR. See Section 1002.1.

STAIRWAY, See Section 1002.1.

**STORY** means that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a basement or unused underfloor space is more than six feet (1829 mm) above grade for more than 50 percent of the total perimeter or is more than 12 feet (3658 mm) above grade at any point, the basement or unused under-floor space shall be considered as a story. There may be more than one floor level within a story as in the case of a mezzanine or mezzanines.

**STORY, FIRST** means the lowest story in a building which qualifies as a story and which provides the basic services or functions for which the building is used. A floor level in a building having only one floor level shall be classified as a first story, if the floor level is not more than four feet (1219 mm) below grade, for more than 50 percent of the total perimeter, or more than eight feet (2438 mm) below grade at any point.

**STRUCTURAL FRAME** is considered to be the columns and the girders, beams, trusses, and spandrels having direct connections to the columns and all other members which are essential to the stability of the building as a whole.

**TEXT TELEPHONE** is machinery or equipment that employs interactive graphic (for example, typed) communications through the transmission of coded signals across the standard telephone network. Text telephones can include, for example, devices known as TTYs (telecommunication display devices) or computers.

**TRANSIENT LODGING** is a building, facility, or portion thereof, excluding inpatient medical care facilities, that contains one or more dwelling units or sleeping accommodations. Transient lodging may include, but is not limited to, resorts, group homes, hotels, motels and dormitories.

**TRANSIT BOARDING PLATFORM** is a horizontal, generally level surface, whether raised above, recessed below, or level with a transit rail, from which persons embark/disembark a fixed rail vehicle.

TREAD is the horizontal member of a step.

TREAD DEPTH is the horizontal distance from the front to back of tread, including nosing when used.

**TREAD RUN** is the horizontal distance from the leading edge of a tread to the leading edge of an adjacent tread.

**VEHICULAR WAY** is a route intended for vehicular traffic, such as a street, driveway or parking lot.

**WALK** is a surfaced pedestrian way not located contiguous to a street used by the public. (As differentiated from the definition of sidewalk in Section 202.)

**WORK STATION** is an area defined by equipment and/or work surfaces intended for use by employees only, and generally for one or a small number of employees at a time. Examples include ticket booths; the employee side of grocery store checkstands; the bartender area behind a bar; the employee side of snack bars, sales counters and public counters; guardhouses; toll booths; kiosk vending stands; lifeguard stations; maintenance equipment closets; counter and equipment areas in restaurant kitchens; file rooms; storage areas; etc.

#### SECTION 1103B BUILDING ACCESSIBILITY

**1103B.1 Scope.** Accessibility to buildings or portions of buildings shall be provided for all occupancy classifications except as modified or enhanced by this chapter. Occupancy requirements in this chapter may modify general requirements, but never to the exclusion of them. When a building or facility contains more than one use, the occupancy specific accessibility provisions for each portion of the building or facility shall apply.

An accessible route of travel complying with Section 1114B.1.2 shall connect all elements and spaces within a building or facility. Multistory buildings and facilities must provide access to each level, including mezzanines, by ramp or passenger elevator complying with Section 1116B. If more than one elevator is provided, each passenger elevator shall comply with Section 1116B.

#### Exceptions:

- Floors or portions of floors not customarily occupied, including, but not limited to, nonoccupiable or employee spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways or freight (nonpassenger) elevators, and frequented only by service personnel for repair or maintenance purposes: such spaces as elevator pits and elevator penthouses, piping and equipment catwalks, and machinery rooms.
- The following types of privately funded multistory buildings do not require a ramp or elevator above and below the first floor:

Multistoried office buildings (other than the professional office of a health care provider) and passenger vehicle service stations less than three stories high or less than 3,000 square feet (279  $m^2$ ) per story.

Any other privately funded multistoried building that is not a shopping center, shopping mall or the professional office of a health care provider, or a terminal, depot or other station used for specified public transportation, or an airport passenger terminal [In such a facility, any area housing passenger services, including boarding and debarking, loading and unloading, baggage claim, dining facilities, and other common areas open to the public must be on an accessible route from an accessible entrance] and that is less than three stories high or less than 3,000 square feet (279 m²) per story if a reasonable portion of all facilities and accommodations normally sought and used by the public in such a building are accessible to and usable by persons with disabilities.

The elevator exception set forth in this section does not obviate or limit in any way the obligation to comply with the other accessibility requirements in this code. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor.

If a building or facility is eligible for this exception but a passenger elevator is nonetheless planned, that elevator shall meet the requirements of Section 1116B and shall serve each level in the building. A passenger elevator that provides service from a garage to only one level of a building or facility is not required to serve other levels.

1103B.2 Distance to elevators. In new construction of buildings and only where elevators are required, pursuant to Section 1103B.1, and which exceed 10,000 square feet on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each stairs and each escalator. In existing buildings that exceed 10,000 square feet on any floor and in which elevators are otherwise required pursuant to Section 1103B.1, whenever a newly constructed means of vertical access is provided via stairs or an escalator, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each new stairs or escalator.

Exception: Stairs used solely for emergency egress.

#### SECTION 1104B ACCESSIBILITY FOR GROUP A OCCUPANCIES

**1104B.1 General.** All Group A Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

**1104B.2** Assistive-listening systems in assembly areas. Assembly areas, conference and meeting rooms shall provide assistive-listening systems for persons with hearing impairments as provided in this section.

**Exception:** This section does not apply to systems used exclusively for paging, or background music, or a combination of these two uses.

- 1. **Number of personal receivers required.** The minimum number of receivers to be provided shall be equal to 4 percent of the total number of seats, but in no case less than two.
- 2. **Types of listening systems.** Types of assistive-listening systems include, but are not limited to, audio-induction loops, radio frequency systems (AM or FM) and infrared transmission.
- 3. **Location.** If the assistive-listening system provided is limited to specific areas or seats, then such areas or seats shall be within a 50-foot (15 240 mm) viewing distance of the performing area.
- 4. Signage. A sign shall be posted in a prominent place (for example, a customer service counter, ticket booth or assembly area entrance) indicating the availability of assistive-listening devices. The sign complying with Section 1117B.5.1, Items 2 and 3 shall include the international symbol of access for hearing loss complying with Figure 11B-14C and include wording that states "Assistive-Listening System Available."
- 5. Fees and charges. Nothing in this section shall preclude a facility charging for such assistive-listening system its usual fee for audiovisual equipment. However, no surcharge may be placed directly on any particular individual with a disability or any group of individuals with disabilities to cover the costs of such equipment.
- 6. **Permanent and portable systems.** Permanently installed assistive-listening systems are required in areas if (1) they accommodate at least 50 persons or if they have audio-amplification systems, and (2) they have fixed seating. If portable assistive-listening systems are used for conference or meeting rooms, the system may serve more than one room. An adequate number of electrical outlets or other supplementary wiring necessary to support a portable assistive listening system shall be provided.

#### 1104B.3 Auditoriums, assembly halls, theaters and related facilities.

**1104B.3.1 Seating.** In all assembly places where seating is provided, there shall be spaces for persons using wheelchairs and semi-ambulant persons, as provided in this section.

#### Exceptions:

- 1. In existing buildings and facilities when the enforcing agency determines that compliance with the seating requirements of this code would create an unreasonable hardship, such requirements shall not apply. When the unreasonable hardship finding is applied, at least 1 percent of the total seating provided shall be accessible to and usable by persons with disabilities who use wheelchairs and such seating shall comply with the level requirements and the individual space requirements of this code.
- When an existing theater is subdivided into more than one facility having upper levels not accessible by ramp or elevator, and the enforcing agency determines that full compliance with this code would create an unreasonable hardship, such upper levels need not be made accessible, provided all facilities at grade are accessible and any event, showing of motion pictures or other activities made available to the public in all of the facilities are scheduled to ensure that all such functions are available to the public in the accessible facility.

**1104B.3.2 Accessibility to key facilities.** Seating for persons with disabilities shall be accessible from the main lobby or from a primary entrance, together with related toilet facilities.

**1104B.3.3 Variety of locations.** Accessible seating or accommodations in places of public amusement and resort, including theaters, concert halls and stadiums, but not including hotels and motels, shall be provided in a variety of locations so as to provide persons with disabilities a choice of admission prices otherwise available to members of the general public.

#### 1104B.3.4 Wheelchair spaces.

1. The number of such spaces is as shown in Table 11B-1.

# TABLE 11B-1 WHEELCHAIR SEATING SPACES

SEATING CAPACITY	NO. OF WHEELCHAIR SEATING SPACES
4 to 25	1
26 to 50	2
51 to 300	4
301 to 500	6

In addition, 1 percent, but not less than one, of all fixed seats, shall be aisle seats with no armrests on the aisle side, or removable or folding armrests on the aisle side. Each such seat shall be identified by a sign or marker. Signage notifying patrons of the availability of such seats shall be posted at the ticket office.

- 2. When the seating capacity exceeds 500, one additional wheelchair seating space shall be provided for each total seating capacity increase of 100.
- 3. The ground or floor at spaces shall be level and shall comply with Section 1124B.

1104B.3.5 Placement of wheelchair locations. Wheelchair areas shall be an integral part of any fixed seating plan, and shall be arranged so as to provide persons with disabilities a choice of admission prices and lines of sight comparable to those for members of the general public. Each wheelchair area shall adjoin an accessible route which shall also serve as a means of egress in case of emergency. At least one companion fixed seat shall be provided next to each wheelchair seating area. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location in addition to complying with Section 1104B.3.3.

#### Exceptions:

- Accessible viewing positions where seating capacity is less than 300 may be clustered for bleachers, balconies
  and other areas having sight lines that require slopes of greater than 5 percent. Equivalent accessible viewing
  positions may be located on levels having accessible egress.
- 2. Where it is determined that dispersing accessible seating throughout an existing assembly area would create an unreasonable hardship, accessible seating areas may be clustered. Each accessible seating area shall have provisions for companion seating and shall be located on an accessible route that also serves as a means of emergency egress.

**1104B.3.6 Size of wheelchair location.** Each wheelchair location shall provide minimum clear floor or ground space as shown in Figure 11B-15, and shall adjoin an egress aisle on at least one side.

**1104B.3.7 Removable seats.** Readily removable seats may be installed in these wheelchair spaces when such spaces are not required to accommodate wheelchair users.

1104B.3.8 Seating for semi-ambulant individuals. In addition to spaces provided for wheelchair users as noted in Sections 1104B.3.4 through 1104B.3.7 above, there shall be provided seating for semi-ambulant individuals. The number of such seating shall be equal to at least 1 percent of the total seating and shall be no fewer than two. Such seats shall provide at least 24 inches (610 mm) clear leg space between the front of the seat to the nearest obstruction or to the back of the seat immediately in front.

**1104B.3.9 Life safety.** In determining the location of seating for persons with disabilities, life safety shall be considered, and all seating provided must comply with the fire and panic safety requirements of the State Fire Marshal.

**1104B.3.10 Access to performing areas.** An accessible route shall connect wheelchair seating locations with performing areas, including stages, arena floors, dressing rooms, locker rooms and other spaces used by performers.

**1104B.3.11 Stages, enclosed and unenclosed platforms, and orchestra pits.** Stages, enclosed and unenclosed platforms and orchestra pits shall be made accessible to persons with disabilities.

#### Exceptions:

- 1. When the enforcing agency finds that requiring compliance with this code, for an enclosed or unenclosed platform or depressed area not more than 24 inches (610 mm) above or below an adjacent accessible level, would create an unreasonable hardship, the enclosed and unenclosed platform or depressed area shall be made accessible by a portable ramp with a slope not exceeding 1 unit vertical to 12 units horizontal (8.33 percent slope).
- In existing buildings and facilities, all stages, enclosed or unenclosed platforms, and orchestra pits need not be
  accessible when the enforcing agency determines that compliance with this code would create an
  unreasonable hardship.

**1104B.3.12 Ticket booths.** Customer and employee sides of ticket booths and of concession and refreshment sales facilities shall be made accessible to persons with disabilities.

**1104B.3.13 Miscellaneous areas.** Public toilets and other public areas shall be made accessible to persons with disabilities.

1104B.4 Stadiums, grandstands, bleachers, athletic pavilions, gymnasiums and miscellaneous sport-related facilities.

- 1104B.4.1 Spectator seating. Spectator seating shall comply with Section 1104B.3.
- 1104B.4.2 Ticket booth. The customer side of a ticket booth shall be, and the employee side may be, accessible.
- **1104B.4.3 Participation areas.** Participation areas shall be accessible to persons with disabilities, including the following listed and similar activity areas:
  - 1. Tennis, racquetball and handball courts.
  - 2. Gymnasium floor areas and general exercise rooms.
  - 3. Basketball, volleyball and badminton courts, and bowling lanes.
  - 4. Swimming pool deck areas must be accessible, and a mechanism to assist persons with disabilities in gaining entry into the pool and in exiting from the pool shall be provided. Such a mechanism may consist of a swimming pool lift device as long as the device meets all of the following criteria:
    - 4.1. Have a seat that meets all of the following:
    - 4.1.1. The seat must be rigid;
    - 4.1.2. The seat must be not less than 17 inches (423 mm) and not more than 19 inches (483 mm), inclusive of any cushioned surface that might be provided, above the pool deck;
    - 4.1.3. The seat must have two armrests. The armrest on the side of the seat by which access is gained shall be either removable or fold clear of the seat;

- 4.1.4. The seat must have a back support that is at least 12 inches (305 mm) tall;
- 4.1.5. The seat must have an occupant restraint for use by the occupant of the seat, and the restraint must meet the standards for operable controls in compliance with Section 1117B.6, Items 1 through 4.
  - 4.2. Be capable of unassisted operation from both the deck and water levels.
  - 4.3. Be stable and not permit unintended movement when a person is getting into or out of the seat.
  - 4.4. Be designed to have a live-load capacity of not less than 300 pounds.
  - 4.5. Be positioned so that, if the pool has water of different depths, it will place the operator into water that is at least three feet (914 mm) deep.
  - 4.6. Lower the operator at least 18 inches (457 mm) below the surface of the water.
- 5. Athletic team rooms and facilities, playing fields and running tracks.

1104B.4.4 Clubrooms. Clubrooms shall be made accessible to persons with disabilities.

**1104B.4.5 Sanitary and locker facilities.** Where spectator and/or participant sanitary and/or locker facilities are provided, they shall conform with the requirements in Section 1115B.

#### Exceptions:

- Where the enforcing agency determines that compliance with these regulations would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided through the use of other methods or materials.
- 2. In existing buildings, when the enforcing agency finds that compliance with regulations would create an unreasonable hardship, an exception may be granted when all of the following minimum conditions are met:
  - 2.1. When the total seating does not exceed 5,000 at least 1 percent of such seating shall be accessible to and usable by persons with disabilities. When the total seating provided exceeds 5,000, one additional seat for each 2,000 seats provided over 5,000 shall be accessible to and usable by persons with disabilities.
  - 2.2. Sanitary facilities, ticket booths, clubrooms, concessions and refreshment facilities shall be accessible.
  - 2.3. One of each type of participation areas is usable and accessible.

#### 1104B.5 Dining, banquet and bar facilities.

1. **General.** Dining, banquet, and bar facilities shall be made accessible to persons with disabilities as provided in this section.

#### Exceptions:

- In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.
- 2. In existing buildings, these regulations shall not apply when legal or physical constraints would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.
- Entrance. Access to these facilities shall be provided at entrances and exits as required by Section 1133B.1.1.
- 3. **Functional activity.** All dining areas, including raised or sunken dining areas, loggias, outdoor seating areas, and all areas where each type of functional activity occurs shall be accessible. For existing buildings, see Section 1120B, Floors and Levels.

- 4. Seating. Each dining, banquet and bar area shall have one wheelchair seating space for each 20 seats, with at least one minimum wheelchair seating space per functional area. Such seating shall be designed and arranged to permit use by wheelchair occupants, and shall comply with Section 1122B, "Fixed or Built-in Seating, Tables, and Counters." Access to such seating spaces shall be provided with main aisles not less than 36 inches (914 mm) clear width. In establishments where separate areas are designated for smoking and non-smoking patrons, the required number of accessible fixed tables (or counters) shall be proportionally distributed between the smoking and non-smoking areas. Accessible seating spaces shall be integrated with general seating to allow a reasonable selection of seating area and to avoid having one area specifically highlighted as the area for persons with disabilities. The ratio of accessible seating is based on the total number of seats provided. Where food or drink is served at counters exceeding 34 inches (865 mm) in height for consumption by customers seated or standing at the counter, a portion of the main counter which is 60 inches (1525 mm) in length minimum shall be provided in compliance with Section 1122B.
- 5. Food service aisles. Food service aisles shall be a minimum of 36 inches (914 mm) of clear width with a preferred width of 42 inches (1067 mm) where passage of stopped wheelchairs by pedestrians is desired. Tray slides shall be mounted no higher than 34 inches (864 mm) above the floor as shown in Figure 11B-16. If self-service shelves are provided, at least 50 percent of each type must be within the reach ranges in Sections 1118B.5 and 1118B.6.
- Tableware and condiment areas. Self-service tableware, dishware, condiments, food and beverage display shelves, and dispensing devices shall comply with Sections 1118B and 1122B.4. See Figure 11B-17.
- 7. Restrooms. Restrooms and powder rooms shall conform to requirements in Section 1115B.
- 8. **Food preparation areas.** Access to food preparation areas shall comply with the provisions for entrance doors and doorways in Section 1008, and aisles in Sections 1014.4 and 1014.4.1.

# 1104B.6 Religious facilities.

**1104B.6.1 General.** Religious facilities shall be made accessible to persons with disabilities as provided in this section.

**Exception:** In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

1104B.6.2 Sanctuary. Sanctuary areas shall be made accessible to persons with disabilities.

- **1104B.6.2.1** Wheelchair seating spaces in these areas shall conform to the requirements in Section 1104B.3.1.
- **1104B.6.2.2** Wheelchair access shall be provided to raised platforms, choir rooms, choir lofts, performing areas and other similar areas.

**Exception:** In existing buildings, these regulations shall not apply to choir lofts when the enforcing agency determines that such compliance would create an unreasonable hardship.

- **1104B.6.3** Assembly areas. Assembly areas shall be made accessible to persons with disabilities. Enclosed and unenclosed platforms and stages in assembly areas shall conform to these requirements.
- **1104B.6.4 Classrooms and offices.** Classrooms and offices shall have entry doors that conform to the requirements in Chapter 10.
- 1104B.6.5 Sanitary facilities. Sanitary facilities shall conform to the requirements in Section 1115B.

## SECTION 1105B ACCESSIBILITY FOR GROUP B OCCUPANCIES

Group B Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

#### Exceptions:

- 1. In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.
- 2. In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5
- 3. For floors and levels in new and existing buildings, see Section 1120B.

**1105B.1 General.** The provisions of this section apply to the specified types of facilities and identify specific requirements of accessibility and usability which shall be provided for each of the listed occupancy uses.

**1105B.2 Group B occupancies.** Group B Occupancies used for assembly purposes shall conform to the requirements as specified in Section 1114B.1.1. For floors and levels in dining, banquet and bar facilities, see Section 1120B.

**1105B.3 Office buildings and personal and public service facilities.** Office buildings and personal and public service facilities shall conform to the provisions of this section.

**1105B.3.1 Facilities covered.** Facilities covered in this section are those that are used by the public as customers, clients, visitors or which are potentially places of employment and shall include, but not be limited to, the following requirements:

- All types of general and specialized business professional offices, including those related to professional medicine or dentistry, insurance, real estate, attorneys, credit bureaus, consultants, counseling and accounting.
- 2. All types of sales establishments, including outlets for all general and special merchandise and equipment, including personal and household furnishings and supplies, foods, sporting equipment, office supplies, vehicles and related parts and supplies, building materials, and pet shops.
- 3. All personal and public service facilities, including banks, savings and loan companies, credit unions, newspaper and printing establishments, photographic studios, launder mats, cleaning and laundry outlets, veterinarian clinics and hospitals, automobile rental agencies, travel bureaus, public utility facilities, police stations and detention facilities, courtrooms and fire stations.
- In addition to the requirements of this section, all areas used for business transactions with the public shall comply with Sections 1110B.1 Sales and 1122B Fixed or Built in Seating, Tables, and Counters.

### 1105B.3.2 Business and professional offices. Areas to be made accessible include the following:

- 1. Client and visitor areas and office areas, together with related toilet rooms.
- 2. Conference rooms, counseling rooms or cubicles and similar areas.
- 3. Employee work areas shall have a minimum of 36 inches (914 mm) clear width access, except as modified in other portions of these regulations. See Sections 1133B.6.1 and 1133B.6.2.
- Professional medical and dental offices shall be made accessible and shall also comply with Section 1109B.

1105B.3.3 Personal and public service facilities. Areas to be made accessible include the following:

- 1. Client and visitor areas, office areas, and related toilet rooms shall be made accessible.
- 2. Employee work areas shall have a minimum of 36 inches (914 mm) clear width access, except as modified in other portions of these regulations. See Sections 1133B.6.1 and 1133B.6.2.
- 3. Automated teller machines used by a financial institution and its customers for the primary purposes of executing financial transactions shall be located on an accessible route of travel complying with Section 1114B.1.2 and shall comply with Section 1117B.7.

### 1105B.3.4 Public utility facilities. Areas to be made accessible include the following:

- Office areas, meeting rooms and similar areas together with related toilet rooms shall be made accessible.
- Public tour areas, to the extent that such public tours are conducted through or about a facility, or where the public is permitted to walk in such areas, shall provide accessibility in those portions of the facility and grounds where this occurs.

#### Exceptions:

- Facilities located in operational areas which would not have any reasonable availability to or usage by persons who use wheelchairs for mobility are not subject to the wheelchair accessibility requirements of these regulations.
- When the enforcing agency determines that compliance with this subsection would create an unreasonable hardship, an exception to such provision shall be granted when equivalent facilitation is provided.
- 3. Visitor overlook facilities, orientation areas and similar public-use areas, and any sanitary facilities that serve these facilities shall be made accessible.
- 4. Where public parking is provided, spaces shall be provided for persons with disabilities as specified in Sections 1129B and 1130B.

# **1105B.3.5 Police department, law enforcement, fire department facilities and courtrooms.** Areas to be made accessible include the following:

- 1. Office areas, conference rooms, classrooms, dispatch rooms and similar areas, along with related sanitary facilities, shall be made accessible.
- 2. Detention-area visitor room shall be made accessible.
- 3. At least one detention cell facility with supporting sanitary facilities shall be made accessible.
- 4. Courtroom areas, including the judge's chambers and bench, counsel tables, jury box, witness stand and public seating area shall be made accessible.

## 1105B.3.6 Miscellaneous general standards.

- 1. Circulation aisles and pedestrian ways shall be sized according to functional requirements and in no case shall be less than 36 inches (914 mm) in clear width.
- Storage areas. The doorway providing access to all such areas shall not be less than 32 inches (813 mm) in clear width. Storage areas shall be made accessible in the number and dimensions provided in Section 1125B.

## SECTION 1106B ACCESSIBILITY FOR GROUP E OCCUPANCIES

**1106B.1 General.** Group E Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

#### Exceptions:

- 1. In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.
- In existing buildings, where the enforcing agency determines that, because of physical constraints, compliance with these
  regulations or equivalent facilitation would create an unreasonable hardship, these regulations shall not apply. See
  Section 109.1.5.

**1106B.2 Laboratory Rooms.** Laboratory rooms shall have at least one workstation and at least 5 percent of all workstations accessible to and usable by persons with disabilities in compliance with Section 1118B, "Space Allowance and Reach Ranges" and Section 1122B, "Fixed or Built-in Seating, Tables, and Counters".

**Exception:** Where the enforcing agency determines that it would create an unreasonable hardship to require compliance with these regulations for special-use rooms such as laboratory preparation rooms, supply rooms, small research laboratories, and areas containing specialized equipment not readily usable by persons with particular disabilities, such facilities need not comply with these regulations, except that a clear width of 32 inches (813 mm) shall be maintained into such rooms.

1106B.3 Teaching facility cubicles, study carrels, etc. Teaching facility cubicles, study carrels, etc., shall have 5 percent, but always at least one cubicle or carrel in each group (language, dental, audiovisual, typing, drafting, darkrooms, etc.) made accessible to and usable by persons with disabilities in compliance with Section 1118B, "Space Allowance and Reach Ranges" and Section 1122B, "Fixed or Built-in Seating, Tables, and Counters."

## 1106B.4 Library general use areas.

- General. Library general use areas such as those housing card files, book stacks, periodicals, reading and study areas, reference areas, information desks, circulation counters, reserve areas, special facilities or collections, etc., shall be made accessible to persons with disabilities.
- 2. **Open book stacks.** Open book stacks (those available for customer use) shall be on an accessible route complying with Section 1114B.1.2, may be of normal height, and shall have main aisles no less than 44 inches (1118 mm) in clear width and side, range and end aisles no less than 36 inches (914 mm) in clear width.

In existing buildings, multitiered, closed book stacks (those restricted to employee use) are exempt from these accessibility standards.

- 3. **Height of book shelves.** Unless an attendant is available to assist persons with disabilities, all book shelving shall be located not more than 54 inches (1372 mm) above the floor.
- 4. **Card catalogs and magazine displays.** Minimum clear aisle space and maximum reach heights at card catalogs and magazine displays shall comply with Section 1118B, with a height of 48 inches (1219 mm) preferred irrespective of reach allowed.

# SECTION 1107B FACTORIES AND WAREHOUSES

Factories and warehouses shall conform to the provisions of this section, Section 1103B.1 and Section 1103B.1, Exception 2, for multistory buildings. See also the general requirements in Section 1114B.1.1.

**Exception:** In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

#### 1107B.1 Factories.

- 1. Major or principal floor areas shall be made accessible.
- 2. Office areas shall be made accessible.
- 3. Sanitary facilities serving these areas shall be made accessible.

#### 1107B.2 Warehouses.

- 1. Miscellaneous warehousing areas which are located on the floor nearest grade and those areas on other floors that are otherwise provided with access by level entry, ramp or elevator shall be made accessible.
- 2. Office areas shall be made accessible.
- 3. Sanitary facilities serving these areas shall be made accessible.

### SECTION 1108B ACCESSIBILITY FOR GROUP H OCCUPANCIES

**1108B.1 General.** Group H Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

#### Exceptions:

- In existing Group H Occupancies, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation and protection are provided.
- In existing Group H Occupancies, the provisions of this section shall not apply when legal or physical constraints prevent compliance with these building standards or the provisions of equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.
- **1108B.2** Accessible sanitation facilities. Accessible sanitation facilities in all Group H Occupancies shall be provided as specified in this chapter.
- **1108B.3 Accessible routes.** Entrances, stairs, ramps, doors, turnstiles, corridors, walks, sidewalks and hazards shall provide accessibility as specified in Section 1133B.
- **1108B.4 Accessible floors and levels.** Accessible floors and levels shall comply with the requirements specified in this chapter.
- **1108B.5 Employee work areas.** Employee work areas shall be accessible by means of a 36 inch-minimum (914 mm) aisle width and a 32 inch-minimum (813 mm) clear opening door width, as specified in Sections 1133B.6.1 and 1133B.6.2.
- **1108B.6** Accessible facilities covered in this chapter are those that are used by the public as customers, clients, visitors or which are potential places of employment.

## SECTION 1109B ACCESSIBILITY FOR GROUP I OCCUPANCIES

**1109B.1 General.** All Group I Occupancies shall be accessible as provided in this chapter. See also the general requirements in Section 1114B.1.1.

**Exception:** In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

1109B.2 Entrance. At least one accessible entrance shall be protected from the weather by canopy or roof overhang. Such entrances shall incorporate a passenger loading zone. Passenger loading zones shall provide an access aisle at least 60 inches (1524 mm) wide and 20 feet (6096 mm) long adjacent and parallel to the vehicle pull-up space. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with Chapter 11B shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1 unit vertical in 50 units horizontal (2-percent slope) in all directions. Minimum vertical clearance of 114 inches (2896 mm) at accessible passenger loading zones and along vehicle access routes to such areas from site entrances shall be provided.

**Exception:** Clinics and other medical facilities that are not intended for patient stays of 24 hours or more, and that are located above the first story of a building, and that do not have a dedicated entrance from the exterior of the building at the first story.

**1109B.3 Patient bedrooms and toilet rooms.** Patient bedrooms and associated toilet facilities shall be made accessible as follows:

- Long-term-care facilities, including skilled nursing facilities, intermediate care facilities, bed and care, and nursing homes shall have at least 50 percent of patient bedrooms and toilet rooms, and all public-use and common-use areas, accessible.
- 2. General-purpose hospitals, psychiatric facilities, and detoxification facilities shall have at least 10 percent of patient bedrooms and toilets, and all public-use and common-use areas, accessible.
- 3. Hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, shall have all patient bedrooms and toilets and all public-use and common-use areas accessible.

1109B.4 Patient bedroom areas. Accessible patient bedrooms shall comply with the following requirements:

- 1. Each bedroom shall have a turning space measuring 60 inches (1524 mm) clear in diameter, or that is a T-shaped space complying with Figure 11B-12. In rooms with two beds, it is preferable that this space be located between beds
- 2. Each bedroom shall have a minimum clear floor space of 36 inches (914 mm) along each side of the bed, and shall provide an accessible route to each side of the bed.
- 3. Each bedroom shall have an accessible door that complies with Section 1133B.2.

**1109B.5 Patient toilet rooms and bathing facilities.** Patient toilet rooms and bathing facilities required to be accessible shall comply with Section 1115B.

**1109B.6 Diagnostic and treatment areas.** Diagnostic and treatment areas and, where applicable, at least one dressing room, sanitary facility, etc., for each unit or suite, shall be made accessible.

**1109B.7 Waiting areas, offices and sanitary facilities.** Waiting areas, offices and sanitary facilities serving them shall be made accessible as covered in other portions of these standards.

**1109B.8 Offices and suites.** In buildings that house offices and suites of physicians, dentists, etc., all such offices or suites shall be made accessible, subject to other provisions of these regulations.

## SECTION 1110B ACCESS FOR GROUP M OCCUPANCIES

1110B.1 Sales.

**1110B.1.1 General areas.** General sales, display and office areas together with related toilet rooms shall be made accessible. See also the general requirements in Section 1114B.1.1.

#### Exceptions:

- Minor specialized display areas that do not exceed 200 square feet (18.6 m²) in floor area and to which the general public is excluded need not be made accessible.
- Offices in sales facilities that do not exceed 5,000 square feet (465 m²) in total area, that are located on nonaccessible levels, need not be made accessible.

**1110B.1.2 Work areas.** Sales employee workstations shall be located on accessible levels, and the customer side of sales or check-out stations shall be accessible. Employee work areas shall be sized and arranged to provide access to employees in wheelchairs.

1110B.1.3 Check stands. In new construction, check stands, including service counters requiring a surface for transactions, shall be made accessible by providing a 36-inch (914 mm) minimum clear aisle width on the customer side of the check stand. Where check stands are provided, the number of check stands that are accessible shall be as shown in Table 11B-2.

TABLE 11B - 2-CHECKSTANDS

TOTAL NUMBER OF	NUMBER OF CHECKSTANDS OF	
CHECKSTANDS OF EACH DESIGN	EACH DESIGN TO BE ACCESSIBLE	
1 to 4	1	
5 to 8	2	
9 to 15	3	
over 15	3 plus 20% of additional aisles	

In new and existing construction, accessible check stands shall provide a minimum clear checkout aisle width of 36 inches (914 mm) with a maximum adjoining counter height not exceeding 38 inches (965 mm) above the finish floor. The top of the counter lip shall not exceed 40 inches (1016 mm) above the finish floor accessible check-stands shall always be open to customers with disabilities and shall be identified by a sign clearly visible to those in wheelchairs. The sign shall display the International Symbol of Accessibility in white on a blue background and shall state "This check stand to be open at all times for customers with disabilities".

In existing buildings, at least one checkout aisle shall be accessible in facilities with less than 5,000 square feet (465 m²) of selling space. In facilities of 5,000 square feet (465 m²) or more of selling space, at least one of each design of checkout aisle shall be made accessible when altered until the number of accessible checkout aisles of each design equals the number required in new construction.

Examples of checkout aisles of different design include those which are specifically designed to serve different functions. Different design includes, but is not limited to, the following features: length of belt or no belt or permanent signage designating the aisle as an express lane.

**1110B.1.4 Point-of-sale machines.** All point-of-sale machines used by customers for the primary purpose of executing transactions between the business entity and the customer shall comply with Section 1117B.7.

1110B.1.5 Turnstiles. See Section 1133B.2.3.4.

**1110B.1.6 Theft prevention barriers.** Where shopping cart theft prevention barriers are used, they shall conform to the following requirements:

- Each entrance and exit provided for public use shall be accessible to and usable by persons with disabilities.
- Shopping cart barriers located at a public entrance or exit shall be designed to provide a clear, unobstructed opening at least 32 inches (813 mm) in width for ingress and egress of persons with disabilities.
- 3. Where gates are used, they shall open in the direction of travel, provide a clear unobstructed opening 32 inches (813 mm) in width and be maintained unlocked during business hours. Gates shall not operate a publicly audible alarm system or require more than 5 foot-pounds of force (22.2 N·m).

- 4. Where a clear unobstructed opening is provided, a level area is required on both sides of the clear opening or gate which extends a minimum of 44 inches (1118 mm) on each side of the opening and is at least 48 inches (1219 mm) in width.
- 5. Where a gate is used, the level area on both sides of the clear opening or gate shall be a minimum of 60 inches (1524 mm) in width and extend a minimum of 60 inches (1524 mm) (measured from the gate in a closed position) in the direction of the gate swing. The level area opposite the gate swing shall be a minimum of 48 inches (1219 mm) in width and extend a minimum of 42 inches (1067 mm).
- 6. Where a gate is used, the bottom of the gate shall be within 3 inches (76 mm) of the surface of the path of travel. The surface of the gate on each side shall be smooth to present no hazard to persons with disabilities using the gate and shall be structurally adequate to allow it to be opened with the wheelchair foot pedals.
- 7. The path of travel to and through the clear opening or gate shall be designed to prevent barriers from obstructing it and shall be continuously maintained unobstructed during business hours. Also, the design shall specifically prevent parked vehicles from obstructing ingress and egress.
- 8. Interior and exterior pedestrian traffic barriers (posts, rails, turnstiles, etc.) shall allow unobstructed travel for persons with disabilities through a 32-inch (813 mm) clear opening.

#### 1110B.2 Miscellaneous general standards.

**1110B.2.1 Circulation.** Shelves or display units allowing self-service by customers in mercantile occupancies shall be located on an accessible route of travel complying with Section 1114B.1.2. Circulation aisles and pedestrian ways shall be sized according to functional requirements and in no case shall be less than 36 inches (914 mm) in clear width.

**1110B.2.2 Storage areas.** The doorway providing access to all such areas shall not be less than 32 inches (813 mm) in clear width. Storage areas shall be made accessible in the number and dimensions provided in Section 1125B.

# SECTION 1111B ACCESSIBILITY FOR GROUP R OCCUPANCIES

**1111B.1 General.** Group R Occupancies shall be accessible or adaptable as provided in this chapter. Public-use and common use areas serving adaptable guest and/or dwelling units shall be accessible. See also the general accessibility requirements in Sections 1114B.1.1 and 1111B.

**Exception:** When the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.

**1111B.2 Public and common use rooms or areas.** Public- and common-use rooms and similar areas shall be made accessible to persons with disabilities, subject to specific provisions contained in other portions of these regulations. See also general requirements in Section 1114B.1.1.

At least one of each type of amenity (such as washers, dryers and similar equipment installed for the use of occupants) in each common area shall be accessible and shall be located on an accessible route to any accessible unit or sleeping accommodation.

**Exception:** Where elevators are not required, accessible amenities are not required on inaccessible floors as long as one of each type is provided in common areas on accessible floors.

**1111B.3 Recreational facilities.** When recreational facilities are provided, including swimming pools, they shall comply with Sections 1104B.4.3 and 1132B.2.

1111B.4 Hotels, motels, inns, dormitories, resorts, homeless shelters halfway houses, transient group homes and similar places of transient lodging. Hotels, motels, inns, dormitories, resorts, homeless shelters, halfway houses, transient group homes, and similar places of transient lodging shall provide access for persons with disabilities in accordance with the provisions of the accessibility requirements of this California Building Code, except as herein provided.

Facilities with multi-bed rooms or spaces shall comply with Sections 1111B.4.2 and 1111B.4.3.

Occupancies which are not homeless shelters but are being altered to provide shelter accommodations shall meet the requirements of this section.

- **1111B.4.1 Available range of accommodations.** Accessible guest rooms or suites shall be dispersed among the various classes of sleeping accommodations to provide a range of options applicable to room sizes, costs, amenities provided, and the number of beds provided.
- **1111B.4.2 Guest rooms and suites.** Places of transient lodging shall incorporate the accessibility requirements of this code as modified by this chapter in at least one guest room or dormitory room together with their sanitary facilities as required in Table 11B-3. All accessible sleeping rooms or suites required by Table 11B-3 shall comply with the requirements of Section 1111B.4.5 for hearing impaired guests.
  - **1111B.4.2.1 Spaces.** Where provided as part of an accessible unit, sleeping room or suite, the following spaces shall be accessible and shall be on an accessible route complying with Section 1114B.1.2:
    - 1. The living area;
    - 2. The dining area;
    - 3. At least one sleeping area;
    - 4. Patios, terraces or balconies;
    - 5. Where full bathrooms are provided, at least one full bathroom (that is, one with a water closet, a lavatory, and a bathtub or shower);
    - 6. Where only half baths are provided, at least one half bath;
    - 7. Carports, garages or parking spaces.
  - **1111B.4.2.2 Accessible route.** Guest rooms and suites shall be on an accessible route complying with Section 1114B.1.2. An accessible route shall also connect all accessible spaces and elements, including telephones, within the unit, sleeping room or suite.

## 1111B.4.2.3 Doors.

- **1111B.4.2.3.1 Doors into and within covered rooms and suites.** Doors and doorways designed to allow passage into and within all sleeping rooms, suites or other covered units shall comply with Section 1133B.2.
- **1111B.4.2.3.2 Doors into and within all other rooms and suites.** Doors and doorways designed to allow passage into and within all other sleeping rooms and suites shall comply with Section 1133B.2.2.
- **1111B.4.2.4 Alterations in existing facilities.** When guest rooms are being altered in an existing facility, or portion thereof, subject to the requirements of this section, at least one guest room or suite that complies with the accessibility requirements of this code as modified by this chapter shall be provided for each 25 guest rooms, or fraction thereof, of rooms being altered until the number of such

rooms provided equals the number required to be accessible in Table 11B-3. In addition, at least one guest room or suite that complies with the requirements of Section 1111B.4.5 shall be provided for each 25 guest rooms, or fraction thereof, of rooms being altered until the number of such rooms equals the number required to be accessible in Table 11B-4.

**1111B.4.3 Access to beds.** Accessible sleeping rooms shall have a 36-inch (914 mm) clear width maneuvering space located along both sides of a bed, except that where two beds are provided, this requirement can be met by providing a 36-inch-wide (914 mm) maneuvering space located between the beds.

In addition, there shall be a clear space under the bed for the use of a personal lift device. The clear space shall be on a long side of the bed adjacent to an accessible aisle. The clear space shall extend horizontally to points not more than 12 inches (305 mm) from each end of the bed, vertically not less than 7 inches (178 mm), and not less than 30 inches (762 mm) deep.

- **1111B.4.4 Kitchens, kitchenettes or wet bar facilities.** When accommodations are provided with kitchens, kitchenettes, wet bar units or similar amenities, they shall be accessible and meet the requirements of Section 1133A. Kitchens shall be provided per the number required to be accessible in conformance with Table 11B-3.
- **1111B.4.5** Visual alarms, notification devices and telephones for persons with hearing impairments. In addition to those accessible sleeping rooms and suites required by Section 1111B.4.2, additional sleeping rooms and suites shall be provided with the following features as required by Table 11B-4 as follows:
  - **1111B.4.5.1 Visual alarms.** Visual alarms shall be provided and shall comply with NFPA 72 and Chapter 9, Sections 907.9.1 and 907.9.2.
  - **1111B.4.5.2 Visual notification devices.** Visual notification devices shall also be provided in units, sleeping rooms and suites to alert room occupants of incoming telephone calls and a door knock or bell. Notification devices shall not be connected to visual alarm signal appliances.
  - **1111B.4.5.3 Telephones.** Permanently installed telephones shall have volume controls complying with Section 1117B.2.8; an accessible electrical outlet within 48 inches (1219 mm) of a telephone connection shall be provided to facilitate the use of a text telephone.
- **1111B.4.6** Bathrooms in hotels, motels, inns, dormitories, resorts, homeless shelters, halfway houses, transient group homes and similar places of transient lodging. Required accessible bathrooms for places of transient lodging shall comply with the following provisions:

**Exception:** Hotel and motel bathrooms beyond those specified in Section 1111B.4 need not comply with the provisions of this section or other accessibility provisions of the California Building, Electrical, and Plumbing Codes if they provide the following features:

- All bathroom fixtures are in a location that allows a person using a wheelchair measuring 30 inches by 48
  inches (762 mm by 1219 mm) to touch the wheelchair to any lavatory, urinal, water closet, tub, sauna, shower
  stall and any other similar sanitary installation, if provided.
- All bathroom entrance doors have a clear opening width of 32 inches (813 mm) and shall be either sliding doors or shall be hung to swing in the direction of egress from the bathroom.
- 1. **Doors.** Doors to accessible bathrooms shall comply with Section 1133B.2. Doors shall not swing into the floor space required for any fixture
- 2. **Clear floor space.** All fixtures and controls shall be on an accessible route. There must be within the bathroom a clear floor space measuring 30 inches by 60 inches (762 mm by 1524 mm). The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap.
- 3. **Water closets.** If a toilet compartment is provided, it shall comply with Section 1115B.3.1 or 1115B.3.2; its water closet shall comply with Section 1115B.4.1 of this code.

- 4. **Lavatory and mirrors.** If a lavatory and/or mirror is provided, they shall comply with Sections 1115B.4.3 and 1115B.8.1, as applicable.
- 5. **Controls and dispensers.** If controls, dispensers, receptacles or other types of equipment are provided, then at least one of each shall be on an accessible route and shall comply with Section 1117B.6, "Controls and Operating Mechanisms."
- 6. **Bathing and shower facilities.** If tubs or showers are provided, then at least one accessible tub that complies with Section 1115B.4.5 or at least one accessible shower that complies with Section 1115B.4.4 of this code shall be provided.
- 7. **Toilet facilities.** Toilet facilities shall comply with Section 1111B.4.6, as modified for hotel, motel and dormitory accommodations.

**1111B.4.7 Dormitory rooms.** Dormitory rooms beyond those specified herein shall comply with the adaptability requirements of Section 1111B.5.

#### 1111B.5 Buildings and Complexes Containing Publicly Funded Dwelling Units.

**1111B.5.1 General.** Buildings and complexes containing publicly funded dwelling units shall be accessible as required by Chapter 11A, Housing Accessibility, except that scoping requirements for covered multifamily dwellings include one or more publicly funded dwelling units, and is required to comply with Division IV - Accessibility for Existing Buildings, beginning with Section 1134B.

TABLE 11B-3
ADDITIONAL ACCESSIBILITY REQUIRED IN GUEST ROOMS OR SUITES\*

TOTAL NUMBER OF ROOMS	FULLY ACCESSIBLE ROOMS	PLUS ADDITIONAL ACCESSIBLE ROOMS WITH ROLL-IN SHOWERS	
1 to 25	0	1	
26 to 50	1	1	
51 to 75	3	1	
76 to 100	4	1	
101 to 150	5	2	
151 to 200	6	2	
201 to 300	7	3	
301 to 400	8	4	
401 to 500	9	4 plus 1 for each additional 100 over 400	
501 to 1,000	2% of total	4 plus 1 for each additional 100 over 400	
1,001 and over	20 plus 1 for each 100 over 1,000		

\*Provisions of this chapter are additional modifications to general requirements listed in Section 1114B.1.1.

TABLE 11B-4
ADDITIONAL ACCESSIBILITY REQUIRED FOR HEARING IMPAIRED IN GUEST ROOMS\*

TOTAL NUMBER OF ROOMS	NUMBER OF ROOMS EQUIPPED FOR HEARING IMPAIRED
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2% of total
1,001 and over	20 plus 1 for each 100 over 1,000

\*Provisions of this chapter are additional modifications to general requirements listed in Section 1114B.1.1. For Group I-1 and R-1 occupancies, also see Section 907.9.1.3.

# SECTION 1112B ACCESSIBILITY FOR GROUP S OCCUPANCIES

(Reserved for future use.)

### SECTION 1113B ACCESSIBILITY FOR GROUP U OCCUPANCIES

(Reserved for future use.)

## SECTION 1114B FACILITY ACCESSIBILITY

When buildings are required to be accessible, buildings and facilities shall be accessible as provided in this section.

## 1114B.1 Design and construction.

**1114B.1.1 General.** When accessibility is required by this chapter, it shall be designed and constructed to meet the minimum requirements of the following sections:

**Chapter 11B. Accessibility**; Division I, New Buildings; Division II, Site Accessibility; Division III, Accessibility for Entrances, Exits and Paths of Travel; and Division IV, Accessibility for Existing Buildings

Entrances – [for HCD 1/AC] Section 1120A.1; [for DSA-AC] Section 1133B.1.1

**Doors** – [for HCD 1/AC] Section 1114A.4.4, 1117A.2, 1122A.3.4, 1126A, 1132A; [for DSA-AC] Section 1133B.2

Corridors – [for HCD 1/AC] Section 1120A; [for DSA-AC] Section 1133B.3

Stairways - [for HCD 1/AC] Section 1115A.6, 1123A; [for DSA-AC] Section 1133B.4

Ramps - [for HCD 1/AC] Section 1112A, 1114A, 1122A; [for DSA-AC] Section 1133B.5

Aisles – [for DSA-AC] Section 1133B.6

Walks and Sidewalks - [for HCD 1/AC] Section 1113A; [for DSA-AC] Section 1133B.7

Hazards - [for HCD 1/AC] Section 1116A, 1125A; [for DSA-AC] Section 1133B.8

Elevators - [for HCD 1/AC] Section 3003; [for DSA-AC] Section 1116B

Special Access (Wheelchair) Lifts - [for HCD 1/AC] Section 1124A; [for DSA-AC] Section 1116B.2

Alarms - Chapter 9, Sections 907.9.1 and 907.9.2

Bathing and Toilet Facilities - Section 1115B

Signs and Identification – Section 1117B.5

**Detectable Warnings** [DSA-AC] – Section 1121B.3.1 item 8(a), 1127B.5.7, 1133B.8.5, Part 12 – Chapter 12-11A and 12-11B

See also Part 3, California Electrical Code.

1114B.1.2 Accessible route of travel. When a building, or portion of a building, is required to be accessible or adaptable, an accessible route of travel complying with 1102B, 1114B, 1124B, 1133B.3, 1133B.5, 1133B.7, and 1133B.8.6 shall be provided to all portions of the building, to accessible building entrances and between the building and the public way. Except within an individual dwelling unit, an accessible route of travel shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes. At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks, to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public. At least one accessible route shall connect accessible buildings, facilities, elements and spaces that are on the same site. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility. An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.

Where more than one route of travel is provided, all routes shall be accessible.

**Exception:** Where an elevator is provided for vertical access, only one elevator is required. Where more than one elevator is provided, all elevators shall be accessible. See Section 1114B.1.1 for a list of code sections applicable to accessible route of travel.

**1114B.1.3 Primary entry access.** All entrances and all exterior ground-level exits shall be accessible in compliance with Section 1133B.1.1.

1114B.1.4 Signs. See Section 1117B.5.

1114B.1.5 Adaptable dwelling units. See Section 1111B.

## 1114B.2 Egress and areas of refuge.

**1114B.2.1 General.** In buildings or facilities or portions of buildings or facilities required to be accessible, accessible means of egress shall be provided as required by Chapter 10, Section 1007.

**1114B.2.2** Alarms/emergency warning systems/accessibility. If emergency warning systems are provided, they shall include both audible alarms and visual alarms complying with NFPA 72 and Chapter 9, Section 907.9.1 and 907.9.2.

# SECTION 1115B BATHING AND TOILET FACILITIES (SANITARY FACILITIES)

**1115B.1 General.** Bathing and toilet facilities that serve buildings, facilities or portions of buildings or facilities that are required by these standards to be accessible to persons with disabilities, shall be on an accessible route and shall conform to the following requirements.

The accessible fixtures and controls required in this section shall be on an accessible route. An unobstructed turning space complying with Section 1115B.3.1, Item 1 or 1115B.3.2, Item 1, as applicable, shall be provided within an accessible toilet facility. The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap.

See Section 1111B.4.6 and Chapter 11A for bathrooms in residential occupancies.

**Exception:** In existing buildings or facilities, when the enforcing agency determines that compliance with any building standard under this section would create an unreasonable hardship, an exception to such standard may be granted when equivalent facilitation is provided. When equivalent facilitation is used, the following criteria shall apply:

 All sanitary facilities are not required to comply with these building standards when the enforcing agency determines that sanitary facilities are accessible to and usable by persons with disabilities within a reasonable distance of accessible areas

 When existing sanitary facilities are not being altered to provide accessibility, signage complying with Sections 1117B.5.1, Items 2 and 3, and 1117B.5.8.1 shall be provided at such inaccessible facilities indicating the location of the nearest accessible sanitary facility.

**1115B.1.1 Separate and unisex facilities.** Where separate facilities are provided for persons of each sex, these facilities shall be accessible to persons with disabilities. Where unisex facilities are provided, these facilities shall be accessible to persons with disabilities.

1115B.1.2 Where used by children. Where facilities are to be used solely by small children, the specific heights and clearances may be adjusted to meet their accessibility needs. See Table 1115B-1 for suggested mounting heights and clearances.

## TABLE 1115B-1 SUGGESTED DIMENSIONS FOR CHILDREN'S USE

The Division of the State Architect - Access Compliance recommends the following dimensions as adequately serving the needs of children in projects under our jurisdiction. These recommendations are based on the federal "Recommendations for Accessibility for Children in Elementary School" and other recognized publications on access for children:

A = Adult Dimensions (age 12 and over)

E = Elementary Dimensions

K = Kindergarten and Pre-school Dimensions

		SUGGESTED	
DIMENSION	A (Inches)	E (Inches)	K (Inches)
Toilet centering from wall	18	15	12
Toilet seat height/Dimensions to top of seat	17-19	15	10-12
Grab bar height (side)	33	27	20-22
Toilet paper in front of toilet	12 max	6 max	6 max
Napkin disposal in front of toilet	12 max	12 max	N/A
Dispenser or mirror height	40 max	36 max	32 max
Lavatory/sink top height	34 max	29 max	24 max
Lavatory/sink knee clearance	27 min	24 min	19 min
Urinal lip height	17 max	15 max	13 min
Urinal flush handle height	44 max	37 max	32 max
Drinking fountain bubbler height	36 max	32 max	30 max
Drinking fountain knee clearance	27 min	24 min	22 min
Ramp/stair handrail height	34-38	27	22

**1115B.2 Bathing and shower facilities.** Where facilities for bathing are provided for the public, clients or employees, including showers or bathtubs, at least one shower or bathtub and support facilities such as lockers, and not less than 1 percent of all facilities, shall be accessible and conform to the following standards:

- 1. **Shower areas.** Showers in all occupancies shall be finished as specified in Section 1115B.3.1 item 6 to a height of not less than 70 inches (1778 mm) above the drain inlet. Materials other than structural elements used in such walls shall be of a type which is not adversely affected by moisture.
- 2. **Doors and panels.** Doors and panels of shower and bathtub enclosures shall be substantially constructed from approved, shatter-resistant materials. Hinged shower doors shall open outward.
- 3. **Glazing for shower and bathtub enclosures.** Glazing used in doors and panels of shower and bathtub enclosures shall be fully tempered, laminated safety glass or approved plastic. When glass is used, it shall have minimum thickness of not less than 1/8 inch (3.2 mm) when fully tempered, or 1/4 inch (6.4 mm) when laminated, and shall pass the test requirements of Section 2406.
- Plastics. Plastics used in doors and panels of showers and bathtub enclosures shall be of a shatterresistant type.

#### 1115B.3 Toilet facilities.

**1115B.3.1 Multiple-accommodation toilet facilities.** Multiple-accommodation toilet facilities shall have the following:

- 1. **Wheelchair clearance.** A clear space measured from the floor to a height of 27 inches (686 mm) above the floor, within the sanitary facility room, of sufficient size to inscribe a circle with a diameter not less than 60 inches (1524 mm) in size. Other than the door to the accessible water closet compartment, a door, in any position, may encroach into this space by not more than 12 inches (305 mm).
- 2. Clear floor space at fixtures. Doors shall not swing into the clear floor space required for any fixture
- Accessible water closet. Provide a minimum of one accessible water closet in compliance with Section 1115B.4.1.
- 4. Accessible water closet compartment. Accessible water closet compartments shall comply with the following:
  - 4.1. The compartment shall be a minimum of 60 inches (1524 mm) wide.
  - 4.2. If the compartment has a side-opening door, a minimum 60 inches wide (1524 mm) and 60 inches deep (1524 mm) clear floor space shall be provided in front of the water closet.
  - 4.3. If the compartment has an end-opening door (facing the water closet), a minimum 60 inches wide (1524 mm) and 48 inches deep (1219 mm) clear floor space shall be provided in front of the water closet. The door shall be located in front of the clear floor space and diagonal to the water closet, with a maximum stile width of 4 inches (102 mm).
  - 4.4. The water closet compartment shall be equipped with a door that has an automatic-closing device, and shall have a clear, unobstructed opening width of 32 inches (813 mm) when located at the end and 34 inches (864 mm) when located at the side with the door positioned at an angle of 90 degrees from its closed position.
  - 4.5. The inside and outside of the compartment door shall be equipped with a loop or U-shaped handle immediately below the latch. The latch shall be flip-over style, sliding or other hardware not requiring the user to grasp or twist. Except for door-opening widths and door swings, a clear, unobstructed access of not less than 44 inches (1118 mm) shall be provided to water closet compartments designed for use by persons with disabilities. Maneuvering space at the compartment door shall comply with Sections 1133B.2.4.2 and 1133B.2.4.3, except that the space immediately in front of a water closet compartment shall not be less than 48 inches (1219 mm) as measured at right angles to compartment door in its closed position.
- 5. Large toilet rooms. Where six or more compartments are provided within a multiple-accommodation toilet room, at least one compartment shall comply with Items 3 and 4 above, and at least one additional ambulatory accessible compartment shall be 36 inches (914 mm) wide with an outward swinging self-closing door and parallel grab bars complying with Section 1115B.4.1 Item 3.
- 6. **Interior surfaces.** In other than dwelling units, toilet room floors shall have a smooth, hard, nonabsorbent surface such as Portland cement, concrete, ceramic tile or other approved material which extends upward onto the walls at least 5 inches (127 mm). Walls within water closet

compartments and walls within 24 inches (610 mm) of the front and sides of urinals shall be similarly finished to a height of 48 inches (1219 mm) and, except for structural elements, the materials used in such walls shall be a type which is not adversely affected by moisture.

**1115B.3.2 Single-accommodation toilet facilities.** Single-accommodation toilet facilities shall have the following:

- 1. Wheelchair clearance. There shall be sufficient space in the toilet room for a wheelchair measuring 30 inches (762 mm) wide by 48 inches (1219 mm) long to enter the room and permit the door to close. There shall be in the room a clear floor space of at least 60 inches (1524 mm) in diameter, or a T-shaped space complying with Figure 11B-12 (a) and (b). No door shall encroach into this space for more than 12 inches (305 mm). See Figure 11B-1A.
- 2. Clear floor space at fixtures. Doors shall not swing into the clear floor space required for any fixture.
- 3. Accessible water closet. Provide one accessible water closet in compliance with Section 1115B.4.1.
- 4. Accessible route. All doors, fixtures and controls shall be on an accessible route. The minimum clear width of an accessible route shall be 36 inches (914 mm) except at doors (see Section 1133B.2). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Figure 11B-5E. See also Figure 11B-1A.
- 5. Interior surfaces. In other than dwelling units, toilet room floors shall have a smooth, hard, nonabsorbent surface such as Portland cement, concrete, ceramic tile or other approved material which extends upward onto the walls at least 5 inches (127 mm). Walls within water closet compartments and walls within 24 inches (610 mm) of the front and sides of urinals shall be similarly finished to a height of 48 inches (1219 mm) and, except for structural elements, the materials used in such walls shall be a type which is not adversely affected by moisture.
- 6. Accessible lavatory. Provide one accessible lavatory in compliance with Section 1115B.4.3.
- 7. **Privacy latch.** The entrance door shall contain a privacy latch which complies with Section 1117B.6 Controls and Operating Mechanisms.

For bathrooms serving residential occupancies, see Section 1111B.4.6 and Chapter 11A.

**Exception:** In an existing building, a single-accommodation toilet facility may have the water closet fixture located in an area which provides a clear space of not less than 36 inches (914 mm) wide by 48 inches (1219 mm) long in front of the water closet.

#### 1115B.4 Accessible fixtures.

1115B.4.1 Accessible water closets. Water closets required to be accessible shall comply with this subsection:

- 1. The centerline of the water closet fixture shall be 18 inches (457 mm) from the side wall or partition. On the other side of the water closet, provide a minimum of 28 inches (711 mm) wide clear floor space if the water closet is adjacent to a fixture or a minimum of 32 inches (813 mm) wide clear floor space if the water closet is adjacent to a wall or partition. This clear floor space shall extend from the rear wall to the front of the water closet.
- 2. A minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep clear floor space shall be provided in front of the water closet.
- 3. Grab bars for water closets not located within a compartment shall comply with Section 1115B.7 and shall be provided on the side wall closest to the water closet and on the rear wall. Grab bars for water closets located within an accessible compartment shall comply with Section 1115B.7

and shall be provided on the side wall closest to the water closet and on the rear wall. Grab bars for water closets located within ambulatory accessible compartments shall comply with Section 1115B.7 and shall be provided on both sides of the compartment.

Grab bars shall not project more than 3 inches (76 mm) into the required clear floor space.

- 3.1. **Side wall.** The side grab bar shall be 42 inches (1067 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1372 mm) minimum from the rear wall with the front end positioned 24 inches (610 mm) minimum in front of the water closet. The side grab bar shall be securely attached and centered 33 inches (838 mm) above and parallel to the floor.
- 3.2. **Rear wall.** The rear grab bar shall be 36 inches (914 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side. The rear grab bar shall be securely attached and centered 33 inches (838 mm) above and parallel to the floor, except that where a tank-type toilet is used which obstructs placement at 33 inches (838 mm), the grab bar may be as high as 36 inches (914 mm) and the space between the grab bar and the top of the tank shall be 1-1/2 inches (38 mm) minimum.
- 4. The height of accessible water closets shall be a minimum of 17 inches (432 mm) and a maximum of 19 inches (483 mm) measured to the top of a maximum 2-inch (51 mm) high toilet seat.

**Exception:** A 3-inch (76 mm) high seat shall be permitted only in alterations where the existing fixture is less than 15 inches (381 mm) high.

- 5. Controls shall be operable with one hand and shall not require tight grasping, pinching or twisting. Controls for the flush valves shall be mounted on the wide side of toilet areas, no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5-pound-force (lbf) (22.2 N).
- See the Section 1134A.7 for additional requirements for water closets in publicly funded housing and all nonresidential occupancies.
- 7. Automatic "spring to lifted position" seats are not allowed.

1115B.4.2 Accessible urinals. Urinals required to be accessible shall comply with this subsection.

- 1. Urinals shall be floor mounted, stall-type or wall hung. Where one or more wall hung urinals are provided, at least one with an elongated rim projecting a minimum of 14 inches (356 mm) from the wall and a maximum of 17 inches (432 mm) from the wall and a maximum of 17 inches (432 mm) above the floor shall be provided.
- Flush controls shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist and shall be mounted no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Electronic automatic flushing controls are acceptable and preferable.
- 3. Where urinals are provided, at least one shall have a clear floor space 30 inches by 48 inches (762 mm by 1219 mm) in front of the urinal to allow forward approach. This clear space shall comply with Section 1118B.4.

**1115B.4.3** Accessible lavatories. Lavatories required to be accessible shall comply with this subsection. The requirements of this subsection shall apply to lavatory fixtures, vanities and built-in lavatories.

1. Faucet controls and operating mechanisms shall be operable with one hand in accordance with this chapter and shall not require tight grasping, pinching or twisting of the wrist. The force

required to activate controls shall be no greater than 5 lbf (22.2 N). Lever-operated, push-type and electronically controlled mechanisms (preferable) are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

- 2. Lavatories, when located adjacent to a side wall or partition, shall be a minimum of 18 inches (457 mm) to the centerline of the fixture. All lavatories that are designated to be accessible shall be a minimum 17 inches (432 mm) in horizontal depth and mounted with the rim or counter edge no higher than 34 inches (864 mm) above the finished floor and with vertical clearance measured from the bottom of the apron or the outside bottom edge of the lavatory of 29 inches (737 mm) reducing to 27 inches (686 mm) at a point located 8 inches (203 mm) back from the front edge. In addition, a minimum 9 inch (230 mm) high toe clearance must be provided extending back toward the wall to a distance no more than 6 inches (150 mm) from the back wall. The toe clearance space must be free of equipment or obstructions.
- 3. A clear floor space 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a lavatory to allow forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend a maximum of 19 inches (483 mm) into knee and toe space underneath the lavatory. See Figure 11B-1D--Knee Clearance.
- Hot water and drainpipes accessible under lavatories shall be insulated or otherwise covered.
   There shall be no sharp or abrasive surfaces under lavatories.

1115B.4.4 Accessible showers. Showers required to be accessible shall comply with this subsection:

1115B.4.4.1 Size and clearances. Accessible showers shall comply with one of the following

- Roll-in shower 60 inches (1524 mm) minimum in width between wall surfaces and 30 inches (762 mm) minimum in depth with a full opening width on the long side. Shower compartment size and clear floor space shall comply with Figure 11B-2A.
- 2. Alternate roll-in shower 60 inches (1524 mm) minimum in width between wall surfaces and 36 inches (914 mm) in depth with an entrance opening width of 36 inches (914 mm) minimum. Shower compartment size and clear floor space shall comply with Figure 11B-2B.
- 3. Alternate roll-in shower 60 inches (1524 mm) minimum in width between wall surfaces and 36 inches (914 mm) minimum in depth as long as the entrance opening width is a minimum 36 inches (914 mm). Shower compartment size and clear floor space shall comply with Figure 11B-2C.
- **1115B.4.4.2 Thresholds.** Thresholds in roll-in type showers shall be 1/2 inch (12.7 mm) high maximum and shall comply with Section 1124B.2.
- **1115B.4.4.3 Orientation.** Where, within the same functional area, two or more accessible showers are provided, there shall be at least one shower constructed opposite hand from the other or others (that is, one left-hand controls versus right-hand controls).
- **1115B.4.4.4 Water controls.** Water controls shall be of a single-lever design, operable with one hand, and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2N). The centerline of the controls shall be located at 40 inches (1016 mm) above the shower floor.
  - 1. Controls in a 60 inch (1524 mm) minimum by 30 inch (762 mm) minimum roll-in shower shall be located on the back wall of the compartment adjacent to the seat and the centerline of the controls shall be within a range of no less than 19 inches (457 mm) and no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2A.

- 2. Controls in a 60 inch (1524 mm) minimum by 36 inch (914 mm) alternate roll-in shower shall be located on the side wall of the compartment adjacent to the seat and the centerline of the controls shall be within a range of no less than 19 inches (457 mm) and no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2B.
- 3. Controls in a 60 inch (1524 mm) minimum by 36 inch (914 mm) minimum alternate roll-in shower with optional enclosure shall be located on the back wall of the compartment adjacent to the seat and the centerline of the controls shall be within a range of no less than 19 inches (457 mm) and no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2C.

1115B.4.4.5 Hand-held sprayer unit. A flexible hand-held sprayer unit with a hose at least 60 inches (1524 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided. This unit shall be mounted such that the top of the mounting bracket is at a maximum height of 48 inches (1219 mm) above the shower floor.

- 1. The hand-held sprayer unit in a 60 inch (1524 mm) minimum by 30 inch (762 mm) minimum roll-in shower shall be located on the back wall of the compartment adjacent to the seat and the centerline of the unit shall be no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2A.
- 2. The hand-held sprayer unit in a 60 inch (1524 mm) minimum by 36 inch (914 mm) alternate roll-in shower shall be located on the side wall of the compartment adjacent to the seat and the centerline of the unit shall be 18 inches (457 mm) from the seat wall as shown in Figure 11B-2B.
- 3. The hand-held sprayer unit in a 60 inch (1524 mm) minimum by 36 inch (914 mm) minimum alternate roll-in shower with optional enclosure shall be located on the back wall of the compartment adjacent to the seat and the centerline of the unit shall be no more than 27 inches (610 mm) from the seat wall as shown in Figure 11B-2C.

1115B.4.4.6 Sprayer unit alternative. Except within guest rooms and suites in hotels, motels and similar transient lodging establishments where accessible shower facilities are provided in areas subject to excessive vandalism, in lieu of providing the fixed flexible hose, two wall mounted shower heads shall be installed. Each shower head shall be installed so that it can be operated independently of the other and shall have swivel angle adjustments, both vertically and horizontally. One shower head shall be located at a height of 48 inches (1219 mm) above the floor.

**1115B.4.4.7 Floor slope.** The maximum slope of the floor shall be 2 percent in any direction. Where drains are provided, grate openings shall be a maximum of 1/4 inch (6.4 mm) and located flush with the floor surface.

#### 1115B.4.4.8 Shower accessories. Shower accessories shall include:

- 1. A folding seat mounted 18 inches (457 mm) above the floor, and with a minimum space of 1 inch (25 mm) and maximum space of 1-½ inches (38 mm) allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6 inches (152 mm) from the mounting wall. The seat dimensions and mounting position shall comply with Figures 11B-2A, 11B-2B, 11B-2C and 11B-2D. The structural strength of seats and their attachments shall comply with 1115B.7.2.
- 2. Grab bars located on walls adjacent to and opposite the seat. Grab bars shall also comply with the diameter, loading and projection requirements of Section 1115B.7. Grab bars shall be mounted between a minimum of 33 inches (838 mm) and a maximum of 36 inches (914 mm) above the shower floor with an L-shaped grab bar mounted on walls opposite and adjacent to the front edge of the seat, but not extended to include that portion of wall over the seat. See Figure 11B-2A or 11B-2B.

**1115B.4.4.9 Soap dish.** When a soap dish is provided, it shall be located on the control wall at a maximum height of 40 inches (1016 mm) above the shower floor, and within reach limits from the seat.

**1115B.4.4.10 Enclosures.** Enclosures, when provided for shower compartments, shall not obstruct controls or obstruct transfer from wheelchairs onto shower seats.

See Figures 11B-2A, 11B-2B, 11B-2C and 11B-2D.

1115B.4.5 Accessible bathtubs. Bathtubs required to be accessible shall comply with this subsection.

- 1. Floor space. Clear floor space at bathtubs shall be as shown in Figure 11B-8.
- 2. **Seat.** An in-tub seat or a seat at the head end of the tub shall be provided as shown in Figures 11B-8 and 11B-9. The structural strength of seats and their attachments shall comply with Section 1115B.7.2. Seats shall be mounted securely and shall not slip during use.
- Grab bars. Grab bars complying with Section 1115B.7 shall be provided as shown in Figure 11B-9.
- 4. Controls. Faucets and other controls shall be located as shown in Figure 11B-9. They shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2 N).
- 5. **Shower unit.** A shower spray unit with a hose at least 60 inches (1524 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided.
- 6. **Bathtub enclosures.** If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchairs onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims.

**1115B.4.6 Accessible drinking fountains.** Where drinking fountains are provided, they shall comply with this section:

1. General. Where only one drinking fountain area is provided on a floor, there shall be a drinking fountain that is accessible to individuals who use wheelchairs in accordance with this section and one accessible to those who have difficulty bending or stooping. This can be accommodated by the use of "hi-low" fountains, or by such other means as would achieve the required accessibility for each group on each floor.

Where more than one drinking fountain is provided on a floor, 50 percent of those provided shall comply with Items 1, 2, 4 and 5 of this section and shall be on an accessible route complying with 1114B.1.2. All drinking fountains shall comply with Item 3 of this section.

2. Clearances. Wall- and post-mounted cantilevered drinking fountains shall be a minimum of 18 inches (457 mm) and a maximum of 19 inches (483 mm) in depth and shall have a clear knee space between the bottom of the apron and the floor or ground not less than 27 inches (686 mm) in height, 30 inches (762 mm) in width, and 8 inches (203 mm) in depth, the depth measurements being taken from the front edge of the fountain back toward the wall or mounting post. The knee clearance space must be free of equipment or obstructions. Additionally, there shall be toe clearance of 9 inches (229 mm) in height above the floor and 17 inches (432 mm) in depth from the front edge of the fountain. The toe clearance space must be free of equipment or obstructions. A clear floor space at least 30 inches (762 mm) by 48 inches (1219 mm) complying with Section 1118B.4 shall be provided in front of the drinking fountain to allow forward approach. A side approach drinking fountain is not acceptable.

3. **Alcoves.** All drinking fountains shall be located completely within alcoves or otherwise positioned so as not to encroach into pedestrian ways. The alcove in which the drinking fountain is located shall not be less than 32 inches (813 mm) in width and 18 inches (457 mm) in depth. See Figure 11B-3 of this code. Additionally, alcoves shall comply with Section 1118B.4 Item 2. Protruding objects located in alcoves or otherwise positioned so as to limit encroachment into pedestrian ways are permitted to project 4 inches into walks, halls, corridors, passageways or aisles.

Exception: When the enforcing agency determines that it would create an unreasonable hardship to locate the drinking fountain in an alcove, the drinking fountain may project into the path of travel, and the path of travel shall be identifiable to the blind as follows. Wing walls shall be provided on each side of the drinking fountain. The wing walls shall project out from the supporting wall at least as far as the drinking fountain to within 6 inches (152 mm) of the surface of the path of travel. There shall also be a minimum of 32 inches (813 mm) clear between the wing walls. Additionally, maneuvering clearances shall comply with Section 1118B.4 Item 2. The drinking fountain and wing walls shall comply with Section 1133B.8.6.

- 4. The bubbler shall be activated by a manually operated system complying with Section 1117B.6 Item 4 that is front mounted or side mounted and located within 6 inches (152 mm) of the front edge of the fountain or an electronically controlled device (preferably). The bubbler outlet orifice shall be located within 6 inches (152 mm) of the front edge of the drinking fountain and within 36 inches (914 mm) of the floor. The water stream from the bubbler shall be substantially parallel to the front edge of the drinking fountain.
- 5. The spout shall provide a flow of water at least 4 inches (102 mm) high so as to allow the insertion of a cup or glass under the flow of water. On an accessible drinking fountain with a round or oval bowl, the spout must be positioned so the flow of water is within 3 inches (75 mm) of the front edge of the fountain.

#### 1115B.4.7 Accessible sinks.

1. **Accessible kitchen sinks.** A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a sink to allow forward approach. The clear floor space shall be on an accessible route and shall extend a maximum of 19 inches (485 mm) underneath the sink (see Figure 11B-1D).

Each accessible sink shall be a maximum of 6-1/2 inches (165 mm) deep. Sinks shall be mounted with the counter or rim no higher than 34 inches (865 mm) above the finish floor. Knee clearance that is at least 27 inches (685 mm) high, 30 inches (762 mm) wide, and 19 inches (485 mm) deep shall be provided underneath sinks. Hot water and drain pipes exposed under sinks shall be insulated or otherwise configured so as to protect against contact. There shall be no sharp or abrasive surfaces under sinks.

Faucet controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be not greater than 5 lbf (22.2 N). Lever-operated, push-type and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

Noncommercial kitchen and counter bar sinks. A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a sink to allow forward approach. The clear floor space shall be on an accessible route and shall extend a maximum of 19 inches (485 mm) underneath the sink (see Figure 11B-1D).

Each accessible sink shall be a maximum of 6-1/2 inches (165 mm) deep. Sinks shall be mounted with the counter or rim no higher than 34 inches (865 mm) above the finish floor. Knee clearance that is at least 27 inches (685 mm) high, 30 inches (762 mm) wide, and 19 inches (485 mm) deep shall be provided underneath sinks. Hot water and drain pipes exposed under sinks shall be insulated or otherwise configured so as to protect against contact. There shall be no sharp or abrasive surfaces under sinks.

Kitchen and counter bar sinks located in common use areas shall have faucet controls and operating mechanisms operable with one hand in accordance with this chapter and shall not require grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Lever-operated, push-type and electronically controlled mechanisms are examples of acceptable designs.

**1115B.5 Passageways.** Passageways leading to sanitary facilities shall have a clear access. All doorways leading to such sanitary facilities shall comply with Section 1133B.2 Doors. Doors shall not swing into the clear floor space required for any fixture. Accessible fixtures and controls shall be on an accessible route.

1115B.6 Identification symbols. Doorways leading to men's sanitary facilities shall be identified by an equilateral triangle, 1/4 inch (6.4 mm) thick with edges 12 inches (305 mm) long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle, 1/4 inch (6.4 mm) thick and 12 inches (305 mm) in diameter. Unisex sanitary facilities shall be identified by a circle, 1/4 inch (6.4 mm) thick, 12 inches (305 mm) in diameter with a 1/4-inch (6.4 mm) thick triangle superimposed on the circle and within the 12-inch (305 mm) diameter. These geometric symbols shall be centered on the door at a height of 60 inches (1524 mm) and their color and contrast shall be distinctly different from the color and contrast of the door. See also Section 1117B.5.1 item 1 for additional signage requirements applicable to sanitary facilities.

1115B.7 Grab bars, tub and shower seats. All grab bars, tub and shower seats shall comply with this section.

1115B.7.1 Diameter or width. The diameter or width of the gripping surfaces of a grab bar shall be 1-½ inches to 1-½ inches (32 mm to 38 mm) or the shape shall provide an equivalent gripping surface. If grab bars are mounted adjacent to a wall, the space between the wall and the grab bars shall be 1-½ inches (38 mm). See Figure 11B-1C.

**1115B.7.2 Structural strength.** The structural strength of grab bars, tub and shower seats, fasteners, and mounting devices shall meet the following specifications:

- 1. Bending stress in a grab bar or seat induced by the maximum bending moment from the application of a 250-pound (1112 N) point load shall be less than the allowable stress for the material of the grab bar or seat.
- 2. Shear stress induced in a grab bar or seat by the application of a 250-pound (1112 N) point load shall be less than the allowable shear stress for the material of the grab bar or seat, and its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall not exceed the allowable shear stress.
- 3. Shear force induced in fastener or mounting device from the application of a 250-pound (1112 N) point load shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.
- 4. Tensile force induced in a fastener by a direct tension force of a 250-pound (1112 N) point load, plus the maximum moment from the application of a 250-pound (1112 N) point load, shall be less than the allowable withdrawal load between the fastener and supporting structure.
- 5. Grab bars shall not rotate within their fittings.

**1115B.7.3 Surface.** A grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3.2 mm).

#### 1115B.8 Accessories.

**1115B.8.1 Mirrors.** Mirrors shall be mounted with the bottom edge of the reflecting surface no higher than 40 inches (1016 mm) from the floor.

1115B.8.2 Medicine cabinets. If medicine cabinets are provided, at least one shall be located with a usable shelf no higher than 44 inches (1118 mm) above the floor. A clear floor space 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 shall be provided in front of a medicine cabinet to allow a forward or parallel approach.

1115B.8.3 Towel, sanitary napkins, waste receptacles, dispensers and controls. Where towel, sanitary napkins, waste receptacles, dispensers, other equipment, and controls are provided, at least one of each type shall be located on an accessible route, with all operable parts, including coin slots, within 40 inches (1016 mm) from the finished floor and shall comply with Section 1117B.6, Controls and Operating Mechanisms.

1115B.8.4 Toilet tissue dispensers. Toilet tissue dispensers shall be located on the wall within 12 inches (305 mm) of the front edge of the toilet seat, mounted below the grab bar, at a minimum height of 19 inches (485 mm), and 36 inches (914 mm) maximum to the far edge from the rear wall. Dispensers that control delivery or that do not permit continuous paper flow shall not be used. See Figure 11B-1A.

**1115B.8.5 Lockers.** Where lockers are provided for the public, clients, employees, members or participants, at least one locker and not less than 1 percent of all lockers shall be made accessible to persons with disabilities. A path of travel not less than 36 inches (914 mm) in clear width shall be provided to these lockers.

## SECTION 1116B ELEVATORS AND SPECIAL ACCESS (WHEELCHAIR) LIFTS

**1116B.1 Elevators.** Passenger elevators shall be accessible. Elevators required to be accessible shall be designed and constructed to comply with this section and with the ASME A17.1, Safety Code for Elevators and Escalators.

1116B.1.1 General. Size of cab and control locations and requirements for accommodation of persons with disabilities.

In buildings two or more stories in height, served by an elevator, or a building served by an elevator required by Chapter 11B, or a building served by an elevator required for accessibility by Section 109.1, if more than one passenger elevator is provided, each full passenger elevator shall comply with this chapter.

#### Exceptions:

- In existing buildings, when the enforcing agency determines that compliance with any regulation under this
  section would create an unreasonable hardship, an exception to such regulation shall be granted when
  equivalent facilitation is provided.
- In existing buildings, where existing shaft configuration or technical infeasibility prohibits strict compliance with Section 1116B.1.8, the minimum car plan dimensions may be reduced by the minimum amount necessary, but in no case shall the inside car area be smaller than 48 inches (1219 mm) by 48 inches (1219 mm).
- In existing buildings, equivalent facilitation may be provided with an elevator car of different dimensions where
  it can be demonstrated that a person using a wheelchair can enter and operate the elevator and when all other
  elements required to be accessible comply with the applicable provisions of Section 1116B.
- These provisions shall not apply to existing buildings when legal or physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.

1116B.1.2 Operation and leveling. The elevator shall be automatic and provided with a self-leveling feature that will automatically bring the car to the floor landings within a tolerance of plus or minus 1/2 inch (12.7 mm) under normal loading and unloading conditions. This self-leveling shall, within its zone, be entirely automatic and independent of the operating device and shall correct the overtravel or undertravel. The car shall also be maintained approximately level with the landing, irrespective of load.

The clearance between the car platform sill and the edge of the hoistway landing shall be no greater than 1-1/2 inches (32 mm).

**1116B.1.3 Door operation.** Power-operated horizontally sliding car and hoistway doors opened and closed by automatic means shall be provided.

1116B.1.4 Door size. Minimum clear width for elevator doors shall be 36 inches (914 mm).

**1116B.1.5 Door protective and reopening device.** Doors closed by automatic means shall be provided with a door-reopening device that will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing.

This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact for activation at a nominal 5 inches and 29 inches (127 mm and 737 mm) above the floor.

Door-reopening devices shall remain effective for a period of not less than 20 seconds.

After such an interval, the doors may close in accordance with the requirements of ASME A17.1.

**1116B.1.6 Hall call.** The minimum acceptable time from notification that a car is answering a call (lantern and audible signal) until the doors of the car start to close shall be calculated by the following equation:

T = D / (1.5 ft/s) or T = D / (455 mm/s)

Where T is the total time in seconds and D is the distance from a point in the lobby or landing area 60 inches (1524 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door (see Figure 11B-40D). For cars with in-car lanterns, T begins when the lantern is visible from the vicinity of hall call buttons and an audible signal is sounded. The minimum acceptable notification time shall be 5 seconds.

**1116B.1.7 Car call.** The minimum acceptable time for doors to remain fully open shall not be less than 5 seconds.

1116B.1.8 Car inside. The car inside shall allow for the turning of a wheelchair. The minimum clear distance between walls or between wall and door, excluding return panels, shall not be less than 80 inches by 54 inches (2032 mm by 1372 mm) for center opening doors, and 68 inches by 54 inches (1727 mm by 1372 mm) for side-slide opening doors. See Figure 11B-40A. Minimum distance from wall to return panel shall not be less than 51 inches (1295 mm).

The centerline of elevator floor buttons shall be no higher than 54 inches (1372 mm) above the finish floor for side approach and 48 inches (1219 mm) for front approach. Emergency controls, including the emergency stop and alarm, shall be grouped in or adjacent to the bottom of the panel and shall be no lower than 2 feet 11 inches (889 mm) from the floor.

For multiple controls only, one set must comply with these height requirements. Floor buttons shall be provided with visual indicators to show when each call is registered. The visual indicators shall be extinguished when each call is answered.

Emergency two-way communication systems between the elevator and a point outside the hoistway shall comply with ASME A17.1. The emergency telephone handset shall be positioned no higher than 4 feet (1219 mm) above the floor, and the handset cord shall be a minimum of 2 feet 5 inches (737 mm) in length. It shall be identified by a raised telephone symbol and corresponding Braille lettering complying with Section 1117B.5.1 Item 1 and located adjacent to the device. If the telephone system is located in a closed compartment, the compartment door hardware shall be lever type conforming to the provisions of Section 1008.1.8, Type of Lock or Latch. Emergency intercommunication shall not require voice communication.

Where possible, a 48-inch (1219 mm) maximum height for elevator floor buttons is preferred.

Controls shall be located on a front wall if cars have center opening doors, and at the side wall or at the front wall next to the door if cars have side opening doors. See Figure 11B-40A.

**1116B.1.9 Car controls.** Identification for the visually impaired shall be as follows:

Passenger elevator car controls shall have a minimum dimension of 3/4 inch (19.1 mm) and shall be raised 1/8 inch (3.2 mm) plus or minus 1/32 inch (0.8 mm) above the surrounding surface.

Control buttons shall be illuminated, shall have square shoulders and shall be activated by a mechanical motion that is detectable.

All control buttons shall be designated by 5/8 inch (15.9 mm) minimum raised characters and standard raised symbols that conform to Sections 1117B.5.2, 1117B.5.3, 1117B.5.5 and 1117B.5.7 immediately to the left of the control button. Grade 2 Braille that conforms to Section 1117B.5.6 shall be located immediately below the character or symbol. A minimum clear space of 3/8 inch (9.5 mm) or other suitable means of separation shall be provided between rows of control buttons. See Figure 11B-40B.

The raised characters and symbols shall be white on a black background.

Controls and emergency equipment identified by raised symbols shall include, but not be limited to, door open, door close, alarm bell, emergency stop and telephone. The call button for the main entry floor shall be designated by a raised star at the left of the floor designation.

In elevator cars, a visual car position indicator shall be provided above the car control panel or over the door to show the position of the elevator in the hoistway, As the car passes or stops at a floor served by the elevators, the corresponding numerals shall illuminate, and an audible signal shall sound. Numerals shall be a minimum of ½ inch (13 mm) high. The audible signal shall be no less than 20 decibels with a frequency no higher than 1500 Hz. An automatic verbal announcement of the floor number at which a car stops or which a car passes may be substituted for the audible signal.

- 1116B.1.10 Hall call buttons. The centerline of the hall call buttons shall be 42 inches (1067 mm) above the floor. Buttons shall be a minimum of ¾ inch (19.1 mm) in size and shall be raised 1/8 inch (3.2 mm) [plus or minus 1/32 inch (0.8 mm)] above the surrounding surface. The button designating the up direction shall be on top. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to, and below, hall call buttons shall not project more than 4 inches (102 mm) from the wall. Hall call buttons shall be internally illuminated with a white light over the entire surface of the button.
- 1116B.1.11 Handrails. A handrail shall be provided on one wall of the car, preferably the rear. The rails shall be smooth, and the inside surface at least 1-½ inches (38 mm) clear of the walls at a nominal height of 32 inches (813 mm) from the floor. Nominal equals ± 1 inch (25 mm). Thirty-two inches (813 mm) required to reduce interference with car controls where lowest button is centered at 35 inches (889 mm) above floor.
- **1116B.1.12 Minimum illumination.** The minimum illumination at the car controls threshold and the landing when the car and landing doors are open shall not be less than 5 foot-candles (54 lx).
- **1116B.1.13 Hall lantern.** A visual and audible signal shall be provided at each hoistway entrance indicating to the prospective passenger the car answering the call and its direction of travel as follows:

The visual signal for each direction shall be a minimum of 2-½ inches (64 mm) high by 2-½ inches (64 mm) wide and visible from the proximity of the hall call button.

The audible signal shall sound once for the up direction and twice for the down direction or shall have verbal annunciators that say "up" or "down".

The centerline of the fixture shall be located a minimum of 6 feet (1829 mm) in height from the lobby floor.

The use of in-car lanterns, located in or on the car doorjambs, visible from the proximity of the hall call buttons and conforming to the above requirements, shall or will be acceptable.

The use of arrow shapes is preferred for visible signals.

1116B.1.14 Doorjamb marking. Passenger elevator landing jambs on all elevator floors shall have the number of the floor on which the jamb is located designated by raised characters that are a minimum of 2 inches (51 mm) in height and conform to Section 1117B.5.5 and Grade 2 Braille that conforms to Section 1117B.5.6 located 60 inches (1524 mm) on center above the floor on the jamb panels on both sides of the door so that they are visible from within the elevator. On the grade level, a raised five pointed star shall be placed to the left of the raised character. The outside diameter of the star shall be 2 inches (51 mm). Braille shall be placed below the corresponding raised characters.

The raised characters shall otherwise comply with Sections 1117B.5.3, 1117B.5.4 and 1117B.5.2. See Figure 11B-40C. Permanently applied plates are acceptable if they are permanently fixed to the jambs.

**1116B.1.15 Location.** Passenger elevators shall be on an accessible route, located near a major path of travel, and provisions shall be made to ensure that they remain accessible and usable at all times the building is occupied.

1116B.2 Special access (wheelchair) lifts. Special access (wheelchair) lifts may be provided between levels in lieu of passenger elevators when the vertical distance between landings, as well as the structural design and safeguards are as allowed by ASME A18.1 Safety Standard for Platform Lifts and Stairway Chair Lifts; the State of California, Division of the State Architect—Access Compliance; the Department of Industrial Relations, Division of Occupational Safety and Health and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation and exit from the lift and shall comply with the restrictions and enhancements of this section in conjunction with Title 8, of the California Code of Regulations.

Additionally, lifts may be provided as part of an accessible route only for the following conditions:

- **1116B.2.1** To provide an accessible route to a performing area in an assembly occupancy, or to a speaking area or similar place (such as a dais or "head table") in an assembly or Group B Occupancy.
- **1116B.2.2** To comply with the wheelchair viewing position line-of-sight and dispersion requirements of Section 1104B.3.5.
- **1116B.2.3** To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than five persons, including, but not limited to, equipment control rooms and projection booths.
- **1116B.2.4** To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible.
  - **1116B.2.4.1 Landing size.** In new construction, the minimum size of landings specified in this section shall be 60 inches by 60 inches (1524 mm by 1524 mm). Other dimensions may be substituted where it can be demonstrated that a person using a wheelchair measuring 30 inches by 48 inches (762 mm by 1219 mm) can enter and operate the lift safely.
  - **1116B.2.4.2 Relationship to the path of travel.** Level and clear floor areas or landings as specified in this section shall be part of "path of travel" requirements.

#### Exceptions:

 The provisions of this section shall not apply to existing buildings when physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.

- When the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception to such regulation shall be granted when equivalent facilitation is provided.
- 3. The installation of lifts as part of an accessible route for additions or alterations is not limited to the four conditions required by Section 1116B.2.

**1116B.3 When provided as a means of egress.** Special access (wheelchair) lifts, when provided as a component in an accessible means of egress, shall conform to the requirements of Section 1116B.3.

**1116B.3.1 Standby power**. To ensure continued operation in case of primary power loss, special access (wheelchair) lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five (5) upward and downward trips.

**1116.B.3.2** Special access (wheelchair) lifts, when provided per Section 1116B.2.2, are permitted to be a component of an accessible means of egress when the area served by the special access lift does not serve more than four wheelchair viewing positions and where any one of the following conditions exist:

- 1. The building has a supervised automatic sprinkler system.
- 2. The maximum distance from the point where the wheelchair occupant is seated to a point where the occupant has a choice of two directions of travel to an exit shall not exceed 30 feet (9144 mm). The length of the path of travel shall include the vertical travel distance of the lift.

**1116B.4 Doors and gates.** Lifts shall have low energy power-operated doors or gates. Doors and gates shall remain open for 20 seconds minimum. End doors shall be 32 inches (813 mm) minimum clear width. Side doors shall be 42 inches (1067 mm) minimum clear width.

Exception: Lifts having doors or gates on opposite sides shall be permitted to have manual doors or gates.

# SECTION 1117B OTHER BUILDING COMPONENTS

1117B.1 Water fountains (drinking). See Section 1115B.4.6.

#### 1117B.2 Telephones.

**1117B.2.1 General.** If public pay telephones, public closed-circuit telephones or other public telephones are provided, they shall comply with this section to the extent required by the following table. See Figure 11B-4.

Number of each type of telephone provided on each floor	Minimum number of telephones required to comply with Section 1117B.2 <sup>1</sup>
1 or more single units	1 or at least 50 percent of telephone unit(s) per floor
1 telephone bank	1 or at least 50 percent of telephone unit(s) per bank
2 or more banks	1 or at least 50 percent of telephone unit(s) per bank At least 1 telephone per floor shall meet the requirements for a forward reach telephone.

<sup>&</sup>lt;sup>1</sup>Additional public telephones may be installed at any height.

- **1117B.2.2 Clear floor ground space.** A clear floor or ground space at least 30 inches by 48 inches (762 mm by 1219 mm) that allows either a forward or parallel approach by a person using a wheelchair shall be provided at telephones.
- 1117B.2.3 Size and approach. The minimum clear floor ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (762 mm by 1219 mm). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be part of the knee space required under some objects. See Figure 11B-5A.
- 1117B.2.4 Relationship of maneuvering clearances to wheelchair spaces. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided. See Figure 11B-5A.
- **1117B.2.5 Floor surfaces of wheelchair spaces.** Floor surfaces of wheelchair spaces shall conform to Section 1124B. Bases, enclosures and fixed seats shall not impede approaches to telephones by people who use wheelchairs.
- **1117B.2.6 Mounting height.** The highest operable part of the telephone shall be within the reach ranges specified in Sections 1118B.5 and 1118B.6. Telephones mounted diagonally in a corner that require wheelchair users to reach diagonally shall have the highest operable part no higher than 54 inches (1372 mm) above the floor. See Figure 11B-4.
- **1117B.2.7 Enclosures.** If telephone enclosures are provided, they may overhang the clear floor space required in Sections 1117B.2.2, 1117B.2.3 and 1117B.2.4 within the following limits:
  - Side reach possible. Where a parallel approach is provided at a telephone within an enclosure, the enclosure and counter may extend beyond the face of the telephone a maximum of 10 inches (254 mm). The enclosure and counter may not overlap the required clear floor or ground space. See Figure 11B-4.
  - 2. **Full-height enclosures.** Entrances to full-height enclosures shall be 30 inches (762 mm) minimum. See Figure 11B-4.
  - 3. Forward reach required. Where a front approach is provided at a telephone within an enclosure, the counter may extend beyond the face of the telephone a maximum of 20 inches (508 mm) into the required clear floor or ground space and the enclosure may extend beyond the face of the telephone a maximum of 24 inches (610 mm). If an additional 6 inches (152 mm) in width of clear floor space is provided, creating a clear floor space of 36 inches by 48 inches (914 mm by 1219 mm), the enclosure may extend more than 24 inches (610 mm) beyond the face of the telephone. See Figure 11B-4.
  - 4. **Protruding telephone enclosures.** Where telephone enclosures protrude into walks, halls, corridors or aisles, they shall also comply with Section 1133B.8.6.
- 1117B.2.8 Telephone equipment for hearing impaired persons. Telephones shall be equipped with a receiver that generates a magnetic field in the area of the receiver cap. If banks of public telephones are provided, at least one in each bank and a total of at least 25 percent of the total number of public telephones, including closed-circuit telephones in a building or facility, shall be equipped with a volume control. Such telephones shall be capable of a minimum of 12 dBA and a maximum of 18 dBA above normal. If an automatic reset is provided, 18 dBA may be exceeded. Public telephones with volume control shall be hearing aid compatible and shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves.

#### 1117B.2.9 Text telephones.

### 1117B.2.9.1 Where required.

- 1. If a total of four or more public pay telephones (including both interior and exterior phones) are provided at a site, and if at least one of the total is in an interior location, then at least one interior public text telephone shall be provided.
- 2. If an interior public pay telephone is provided in a stadium or arena, in a convention center, in a hotel with a convention center or in a covered mall, at least one interior public text telephone shall be provided in the facility.
- If a public pay telephone is located in or adjacent to a hospital emergency room, hospital recovery room or hospital waiting room, one public text telephone shall be provided at each location.

## 1117B.2.9.2 General. Text telephones shall comply with the following requirements:

- Text telephones used with a pay telephone shall be permanently affixed within or adjacent to the telephone enclosure. If an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the text telephone and the telephone receiver.
- 2. Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone in each such bank shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure. The telephone handset shall be capable of being placed flush on the surface of the shelf. The shelf shall be capable of accommodating a text telephone and shall have 6 inches (152 mm) minimum vertical clearance in the area where the text telephone is to be placed.
- 3. Equivalent facilitation may be substituted for the requirements of this section. For example, a portable text telephone may be made available in a hotel at a registration desk if it is available on a 24-hour basis for use with nearby public pay phones. In this instance, at least one pay phone shall comply with Item 2 above. In addition, if an acoustic coupler is used, the telephone handset cord shall be sufficiently long to allow connection of the text telephone and the telephone receiver. Directional signage shall comply with Section 1117B.5.

**1117B.2.9.3 Signage.** Text telephones shall be identified by the International TTY symbol (see Figure 11B-14A). If a facility has a public text telephone, directional signage indicating the location of the nearest such telephone shall be placed adjacent to all banks of telephones that do not contain a text telephone. Such directional signage shall include the International TTY symbol. If a facility has no banks of telephones, the directional signage shall be provided at the entrance or in a building directory.

**1117B.2.10 Controls.** Telephones shall have push-button controls where service for such equipment is available.

**1117B.2.11 Cord length.** The cord from the telephone to the handset shall be at least 29 inches (737 mm) long.

**1117B.2.12 Telephone books.** If telephone books are provided, they shall be located in a position that complies with the reach ranges in Sections 1118B.5 and 1118B.6.

1117B.3 Kitchens. See Section 1133A.

1117B.4 Swimming pools. See Section 1104B.4.3.

1117B.5 Signs and Identification. California's standards for signage are more stringent and are significantly larger and wider than Federal law, Americans with Disabilities Act (ADA) Section 4.30.

**1117B.5.1 General.** When new or additional signs and/or identification devices are provided, or when existing signs and/or identification devices are replaced or altered, the new or altered signs and/or identification devices shall comply with Section 1117B.5. The addition of or replacement of signs and/or identification devices shall not trigger any additional path of travel requirements.

- Identification signs. When signs identify permanent rooms and spaces of a building or site, they shall comply with Sections 1117B.5.2, 1117B.5.3, 1117B.5.5, 1117B.5.6 and 1117B.5.7. For other means of egress signs and identification provisions adopted by SFM and DSA-AC see Chapter 10, Sections 1011.3 for Tactile Exit Signs, 1020.1.6.2 for Tactile Floor Designation Signs in Stairways, 1008.1.8.6(5) for Delayed Egress Locks, 1007.6.5 for Areas of Refuge, and 1007.7 for Exits and Elevators. See also section 1116B for additional signage requirements applicable to elevators and section 1115B.6 for sanitary facilities.
- 2. Directional and informational signs. When signs direct to or give information about permanent rooms and functional spaces of a building or site, they shall comply with Sections 1117B.5.2, 1117B.5.3 and 1117B.5.4.
- 3. Accessibility signs. When signs identify, direct to or give information about accessible elements and features of a building or site, they shall include the appropriate symbol of accessibility and shall comply with Sections 1117B.5.2 and 1117B.5.8.
- 4. Plan review and inspection. Signs and identification as specified in Section 1117B.5.1, when included in the construction of new buildings or facilities, or when included, altered or replaced due to additions, alterations or renovations to existing buildings or facilities, and when a permit is required, shall comply with the following plan review and inspection requirements:
  - 4.1. **Plan review.** Plans, specifications or other information indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval.
  - 4.2. Inspection. Signs and identification shall be field inspected after installation and approved by the enforcing agency prior to the issuance of a final certificate of occupancy per Appendix Chapter 1, Section 110.2, or final approval where no certificate of occupancy is issued. The inspection shall include, but not be limited to, verification that Braille dots and cells are properly spaced and the size, proportion, and type of raised characters are in compliance with these regulations.
  - 4.3. Other signs and identification. Tactile exit signage in Sections 1011.3 and 1011.3.2, tactile floor designation signs in stairways in Section 1020.1.6.2, tactile special egress-control device signs in Section 1008.1.8.6(5), elevator car control identification required in Section 1116B.1.9, elevator doorjamb marking required in Section 1116B.1.14, and sanitary facilities signage required in Section 1115B.6 shall also comply with this section.

**1117B.5.2 Finish and contrast.** Characters, symbols and their background shall have a non-glare finish. Characters and symbols shall contrast with their background, either light on a dark background or dark on a light background.

**1117B.5.3 Proportions.** Characters on signs shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio of between 1:5 and 1:10.

**1117B.5.4 Character height.** Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read. The minimum height is measured using an uppercase X. Lowercase characters are permitted. For signs suspended or projected above the finish floor in compliance with Section 1133B.8.6, the minimum character height shall be 3 inches (76 mm).

**1117B.5.5** Raised characters and pictorial symbol signs. When raised characters are required or when pictorial symbols (pictograms) are used on such signs, they shall conform to the following requirements:

- 1. **Character type.** Characters on signs shall be raised 1/32-inch (0.794 mm) minimum and shall be sans serif uppercase characters accompanied by Grade 2 Braille complying with Section 1117B.5.6.
- 2. **Character size.** Raised characters shall be a minimum of 5/8 inch (15.9 mm) and a maximum of 2 inches (51 mm) high.
- 3. **Pictorial symbol signs (pictograms).** Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. The outside dimension of the pictogram field shall be a minimum of 6 inches (152 mm) in height.
- 4. Character placement. Characters and Braille shall be in a horizontal format. Braille shall be placed a minimum of 3/8 inch (9.5 mm) and a maximum of 1/2 inch (12.7 mm) directly below the tactile characters; flush left or centered. When tactile text is multi-lined, all Braille shall be placed together below all lines of tactile text.

1117B.5.6 Braille. Contracted Grade 2 Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be 1/10 inch (2.54 mm) on centers in each cell with 2/10-inch (5.08 mm) space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch (0.635 mm) above the background. Braille dots shall be domed or rounded.

**1117B.5.7 Mounting location and height.** Where permanent identification signs are provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side of the door. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right.

Where permanent identification signage is provided for rooms and spaces they shall be located on the approach side of the door as one enters the room or space. Signs that identify exits shall be located on the approach side of the door as one exits the room or space.

Mounting height shall be 60 inches (1524 mm) above the finish floor to the center line of the sign. Mounting location shall be determined so that a person may approach within 3 inches (76 mm) of signage without encountering protruding objects or standing within the swing of a door.

See also Section 1115B.6 for additional signage requirements applicable to sanitary facilities.

## 1117B.5.8 Symbols of accessibility.

**1117B.5.8.1 International Symbol of Accessibility.** The International Symbol of Accessibility shall be the standard used to identify facilities that are accessible to and usable by physically disabled persons as set forth in these building standards and as specifically required in this section. See Figure 11B-6.

**Exception:** Signs need not be provided for facilities within an adaptable dwelling unit, or within an accessible patient or guest room.

**1117B.5.8.1.1 Color of symbol.** The symbol specified above shall consist of a white figure on a blue background. The blue shall be equal to Color No. 15090 in Federal Standard 595B.

**Exception:** The appropriate enforcement agency may approve other colors to complement decor or unique design. The symbol contrast shall be light on dark or dark on light.

- 1117B.5.8.1.2 Entrance signs. All building and facility entrances that are accessible to and usable by persons with disabilities shall be identified with a minimum of one International Symbol of Accessibility and with additional directional signs, utilizing the symbol, at junctions where the accessible route of travel diverges from the regular circulation path, to be visible to persons along approaching circulation paths. Entrances which are not accessible shall have directional signage complying with Section 1117B.5.1, Items 2 and 3, which indicates the location of and route to the nearest accessible entrance.
- 1117B.5.8.1.3 Information posted. Buildings that provide specific sanitary facilities and/or elevators for public use that conform to these building standards shall have this information posted in the building lobby, preferably as part of the building directory. The information shall be accompanied by the International Symbol of Accessibility. Inaccessible sanitary facilities shall have directional signage complying with 1117B.5.1 Items 2 and 3 to indicate the location of the nearest accessible sanitary facility.
- **1117B.5.8.2 International TTY symbol.** Where the International TTY Symbol is required, it shall comply with Figure 11B-14A.
- **1117B.5.8.3 Volume control telephones.** Where telephones with volume controls are required to be identified, the identification symbol shall be a telephone handset with radiating sound waves, such as shown in Figure 11B-14B.
- **1117B.5.8.4 Assistive listening systems.** Where assistive listening systems are required to be identified by the International Symbol of Access for Hearing Loss, it shall comply with Figure 11B-14C.
- 1117B.5.9 Traffic-control devices. Pole-supported pedestrian traffic-control buttons shall be identified with color coding consisting of a textured horizontal yellow band 2 inches (51 mm) in width encircling the pole, and a 1-inch wide (25 mm) dark border band above and below this yellow band. Color coding should be placed immediately above the control button. Control buttons shall be located no higher than 48 inches (1219 mm) above the surface adjacent to the pole.
- **1117B.5.10 Signs for text telephones.** Whenever signs shall refer to text telephones for people who are deaf or hard of hearing, the term "TTY" shall be used; the term "TDD" shall not be used.

## 1117B.5.11 Cleaner air symbol.

"STRICTLY FOR PUBLICLY FUNDED FACILITIES OR ANY FACILITIES LEASED OR RENTED BY STATE OF CALIFORNIA. NOT CONCESSIONAIRES". This symbol shall be the standard used to identify a room, facility and paths of travel that are accessible to and usable by people who are adversely impacted by airborne chemicals or particulate(s) and/or the use of electrical fixtures and/or devices. When used, the symbol shall comply with Figure 11B-40.

1117B.5.11.1 Color and size of symbol. The symbol shall be used when the following minimum conditions are met. The symbol, which shall include the text "Cleaner Air" as shown, shall be displayed either as a negative or positive image within a square that is a minimum of 6 inches on each side. The symbol may be shown in black and white or in color. When color is used, it shall be Federal Blue (Color No. 15090 Federal Standard 595B) on white, or white on Federal Blue. There shall be at least a 70-percent color contrast between the background of the sign from the surface that it is mounted on.

Strictly for publicly funded public facilities or any facilities leased or rented by State of California. Not concessionaires.

**1117B.5.11.2 Conditions of use.** Use of the cleaner air symbol is voluntary. The cleaner air symbol shall be permitted for use to identify a path of travel, and a room or a facility when the following is met.

- 1. Floor or wall coverings, floor or wall covering adhesives, carpets, formaldehyde-emitting particleboard cabinetry, cupboards or doors have not been installed or replaced in the previous 12 months.
- 2. Incandescent lighting provided in lieu of fluorescent or halogen lighting, and electrical systems and equipment shall be operable by or on behalf of the occupant or user of the room, facility or path of travel.
- 3. Heating, ventilation, air conditioning and their controls shall be operable by or on behalf of the occupant or user.
- 4. To maintain "cleaner-air" designation only nonirritating, nontoxic products will be used in cleaning, maintenance, disinfection, pest management or for any minimal touch-ups that are essential for occupancy of the area. Deodorizers or Fragrance Emission Devices and Systems (FEDS) shall not be used in the designated area. Pest control practices for cleaner-air areas shall include the use of bait stations using boric acid, sticky traps and silicon caulk for sealing cracks and crevices. Areas shall be routinely monitored for pest problems. Additional nontoxic treatment methods, such as temperature extremes for termites, may be employed in the event of more urgent problems. These pest control practices shall not be used 48 hours prior to placement of the sign, and the facility shall be ventilated with outside air for a minimum of 24 hours following use or application.
- 5. Signage shall be posted requesting occupants or users not to smoke or wear perfumes, colognes or scented personal care products. Fragranced products shall not be used in the designated cleaner-air room, facility or path of travel.
- 6. A log shall be maintained on site, accessible to the public either in person or by telephone, e-mail, fax or other accessible means as requested. One or more individuals shall be designated to maintain the log. The log shall record any product or practice used in the cleaner-air designated room, facility or path of travel, as well as scheduled activities, that may impact the cleaner-air designation. The log shall also include the product label as well as the Material Safety Data Sheets (MSDS).

**1117B.5.11.3 Removal of symbol.** If the path of travel, room and/or facility identified by the cleanerair symbol should temporarily or permanently cease to meet the minimum conditions as set forth above, the cleaner-air symbol shall be removed and shall not be replaced until the minimum conditions are again met.

#### 1117B.6 Controls and operating mechanisms.

- 1. **General.** Controls and operating mechanisms in accessible spaces, along accessible routes or as parts of accessible elements (for example, light switches and dispenser controls) and those required to be accessible by Section 109.1 shall comply with the requirements of this section.
- Clear floor space. Clear floor space complying with Section 1118B.4 that allows a forward or parallel
  approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles and other
  operable equipment.
- 3. **Height.** The highest operable part of all controls, dispensers, receptacles and other operable equipment shall be placed within at least one of the reach ranges specified in Sections 1118B.5 and 1118B.6. Electrical and communication systems receptacles on walls shall be mounted no less than 15 inches (381 mm) above the floor.

**Exception:** These requirements do not apply where the use of special equipment dictates otherwise or where electrical and communication systems receptacles are not normally intended for use by building occupants.

- 4. **Operation.** Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2 N) of force.
- 5. Installation heights of electrical switches and receptacle outlets.
  - 5.1. **Electrical switches.** The center of the grip of the operating handle of controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances or cooling, heating and ventilating equipment, shall be 48 inches (1219 mm) above the floor or working platform.
  - 5.2. **Electrical receptacle outlets.** The center of electrical receptacle outlets on branch circuits of 30 amperes or less shall be installed not more than 48 inches (1219 mm) nor less than 15 inches (381 mm) above the floor or working platform.

#### Exceptions:

- 1. Receptacle outlets installed as part of permanently installed baseboard heaters are exempt.
- 2. Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.
- 3. Baseboard electrical outlets used in relocatable partitions, window walls or other electrical convenience floor outlets are not subject to the minimum height requirements.
- 4. This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

## 1117B.7 Automated teller machines and point of sale machines.

#### 1117B.7.1 Definitions.

**AUTOMATED TELLER MACHINE (ATM)** means any electronic information processing device, including a point-of-sale machine, used by a financial institution or other business entity and its customers for the primary purpose of executing financial transactions between itself and its customers. For the purposes of this section, automated teller machine includes point-of-sale machines used in grocery stores, ticket sales facilities, and other business entities, but does not include card reading devices located on fuel pump islands at gasoline service stations and motor-vehicle fuel facilities.

**ATM SITE** means that immediate area which is within or made or to be made part of an existing building or a building to be constructed, and to which one or more ATMs is or shall be affixed.

ATM INSTALLATION means a single ATM structurally affixed to a building or other structure.

1117B.7.2 General. Where ATMs are provided for the public, they shall comply with this section.

#### Exceptions:

- In grocery stores and other retail outlets with point-of-sale machines located at individual check stands, machines that are located at accessible check stands must be made accessible. Where machines are located away from individual check stands, they must all be made accessible.
- Where the enforcing agency determines that compliance with this regulation would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided through the use of other methods or materials.
- In existing buildings, these regulations shall not apply when legal or physical constraints would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.
- 4. Drive-up only automated teller machines are not required to comply with this section.

Card reading devices located on fuel pump islands at gasoline service stations and motor-vehicle fuel facilities are not required to comply with Sections 1114B through 1126B and all subsections there under.

**1117B.7.3 Controls.** Controls for user activation shall comply with the requirements of Section 1117B.6, Item 4, which states that controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds (22.2 N) of force.

**1117B.7.4 Clearances and reach range.** Free-standing or built-in units not having a clear space under them shall comply with the following as to clearance and reach range.

**1117B.7.4.1 Where one ATM is provided.** Where one ATM is provided at a location, it shall meet the specifications of Section 4.34 of the Americans with Disabilities Act Standards for Accessible Design as follows:

- 1. The ATM shall be located so that clear floor space complying with Section 1118B.4 is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both, to the machine.
- 2. **Forward approach only.** If only a forward approach is possible, operable parts of all controls shall be placed within the forward reach range specified in Section 1118B.5.
- 3. **Parallel approach only.** If only a parallel approach is possible, operable parts of controls shall be placed as follows:
  - 3.1. Reach depth not more than 10 inches (254 mm). Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is not more than 10 inches (254 mm), the maximum height from the floor shall be 54 inches (1372 mm).
  - 3.2. **Reach depth more than 10 inches (254 mm).** Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the ATM or surround is more than 10 inches (254 mm), the maximum height from the floor shall be as shown in Table 11B-5.
- Forward and parallel approach. If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges in Item 2 or 3.
- 5. **Bins.** Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges in Item 2, 3 or 4.

**Exception:** Where a function can be performed in a substantially equivalent manner by using an alternate control, only one of the controls needed to perform that function is required to comply with this section. If the controls are identified by tactile markings, such markings shall be provided on both controls.

1117B.7.4.2 Where two ATMs are provided. Where two ATMs are provided at a location, one shall comply with Section 1117B.7.4.1, except that the highest operable part shall be 48 inches (1219 mm) maximum. The second ATM is not regulated as to height, including height of display.

1117B.7.4.3 Where three or more ATMs are provided. Where three or more ATMs are provided, two shall be used to satisfy Section 1117B.7.4.2, above. For the additional ATMs beyond the first two, at least 50 percent shall comply with Section 1117B.7.4.1. The remainder are not regulated as to height, including height of display. If features provided differ from ATM to ATM, all features shall be equally represented among the accessible ATMs.

**1117B.7.5 Display.** LED, cathode ray or other screen devices intended to be viewed by the user shall be positioned so they are readily visible to and usable by a person sitting in a wheelchair with approximate eye level of 45 inches (1143 mm), and shall comply with the following requirements:

- 1. **Vertically mounted screen devices.** If mounted vertically or tipped no more than 30 degrees away from the viewer, the center line of screens and other screen devices shall be located a maximum of 52 inches (1321 mm) above grade.
- 2. **Angle-mounted screen devices.** If mounted at an angle between 30 degrees and 60 degrees tipped away from the viewer, the center line of screens and other screen devices shall be located a maximum of 44 inches (1118 mm) above grade.
- 3. **Horizontally mounted screen devices.** If mounted at an angle between 60 degrees and 90 degrees tipped away from the viewer, the center line of screens and other screen devices shall be located a maximum of 34 inches (864 mm) above grade.

**Exception:** Automated teller machines unregulated as to height in Sections 1117B.7.4 through 1117B.7.4.3 above are also exempt from this section.

**1117B.7.6 ATM equipment for persons with vision impairments.** Instructions and all information for use shall be made accessible to and independently usable by persons with vision impairments.

TABLE 11B-5
MAXIMUM REACH DEPTH FOR AUTOMATED TELLER MACHINES

REACH DEPTH (X)	MAXIMUM HEIGHT (Y)	
(inches)	(inches)	
x 25.	4 for mm	
10	54	
11	53.5	
12	53	
13	52.5	
14	51.5	
15	51	
16	50.5	
17	50	
18	49.5	
19	49	
20	48.5	
21	47.5	
22	47	
23	46.5	
24	46	

See Figure 11B-5F (d).

1117B.8 Fitting and dressing rooms. Where fitting or dressing rooms are provided for male or female customers, patients, employees or the general public, 5 percent, but never less than one, of dressings rooms for each type of use in each cluster of dressing rooms shall be accessible and located on an accessible route complying with Section 1114B.1.2. Examples of types of dressing rooms are those serving different genders or distinct and different functions as in different treatment or examination facilities. Where only unisex dressing rooms are provided, accessible unisex dressing rooms may be used to fulfill this requirement.

Entry doors shall conform to the requirements of Section 1133B.2 and aisles leading to such doors shall conform to Sections 1133B.6.1 and 1133B.6.2.

The bottom of mirrors provided for use by persons with disabilities shall not be greater than 20 inches (508 mm) from the floor. Mirrors to be used by persons with disabilities shall be full-length, measuring at least 18 inches (457 mm) wide by 54 inches (1372 mm) high, and shall be mounted in a position affording a view to a person on the bench as well as to a person in a standing position.

Clothing hooks shall be located not greater than 48 inches (1219 mm) from the floor.

Every accessible dressing room shall have a 24-inch by 48-inch (610 mm by 1219 mm) bench fixed to the wall along the longer dimension. The bench shall be mounted 17 to 19 inches (432 to 483 mm) above the finish floor. Clear floor space shall be provided alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. The structural strength of the bench and attachments shall comply with Section 1115B.7.2. Where installed in conjunction with showers, swimming pools or other wet locations, water shall not accumulate upon the surface of the bench and the bench shall have a slip-resistant surface.

The minimum clear space within the room shall be 60 inches (1524 mm) in width and length. No door shall encroach into the required space.

# SECTION 1118B SPACE ALLOWANCE AND REACH RANGES

**1118B.1 Wheelchair passage width.** The minimum clear width for single wheelchair passage shall be 32 inches (813 mm) at a point and 36 inches (914 mm) continuously. See Figure 11B-10.

**1118B.2 Width for wheelchair passing.** The minimum width for two wheelchairs to pass is 60 inches (1524 mm). See Figure 11B-11.

**1118B.3 Wheelchair turning space.** The space required for a wheelchair to make a 180 degree turn is a clear space of 60 inches (1524 mm) diameter [see Figure 11B-12 (a)] or a T-shaped space. See Figure 11B-12 (b).

1118B.4 Clear floor or ground space for wheelchairs.

- 1. Size and approach. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (762 mm by 1219 mm). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be part of the knee space required under some objects. See Figure 11B-5A.
- 2. **Relationship of maneuvering clearances to wheelchair spaces.** One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or a part of three sides, additional maneuvering clearances shall be provided as shown in Figure 11B-5A (b).

1118B.5 Forward reach. If the clear floor space allows only forward approach to an object, the maximum high forward reach allowed shall be 48 inches (1219 mm) [see Figure 11B-5C (a)]. The minimum low forward reach is 15 inches (381 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 11B-5C (b).

**1118B.6 Side reach.** If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches (1372 mm) and the low side reach shall be no less than 9 inches (229 mm) above the floor [see Figure 11B-5D (a) and (b)]. If the side reach is over an obstruction, the reach and clearances shall be as shown in Figure 11B-5D (c).

SECTION 1119B
SPECIAL STANDARDS OF ACCESSIBILITY FOR
BUILDINGS WITH HISTORICAL SIGNIFICANCE

See Section 1135B.

# SECTION 1120B FLOORS AND LEVELS

**1120B.1 Floors Within Each Story.** In buildings and facilities, floors of a given story shall be a common level throughout, or shall be connected by pedestrian ramps, passenger elevators or special access lifts.

#### Exceptions:

- In existing buildings, other than dining banquet and bar facilities, when the enforcing agency determines that compliance
  with this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is
  provided.
- 2. In existing dining, banquet and bar facilities, when the enforcing agency determines that compliance with this section would create an unreasonable hardship, an exception shall be granted provided that a minimum of 75 percent of the dining, banquet and bar area shall be a common level throughout or shall be connected by pedestrian ramps, passenger elevators or special lifts and provided that the same services and décor are provided in an accessible space usable by the general public and are not restricted to use by people with disabilities.
- In existing buildings, this section shall not apply when legal or physical constraints would not allow compliance with this section or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.
- 4. Where specifically exempted in other portions of this code.

1120B.2 Floor Surface. The surface of floors shall be slip resistant and shall comply with Section 1124B

# SECTION 1121B TRANSPORTATION FACILITIES

**1121B.1 General.** Every station, bus stop, bus stop pad, terminal, building or other transportation facility, shall incorporate the accessibility requirements of this code as modified by this chapter. The exceptions for elevators in Section 1103B do not apply to a terminal, depot or other station used for specified public transportation, or an airport passenger terminal, or facilities subject to Title II of the Americans with Disabilities Act.

## 1121B.2 Bus stops and terminals.

1121B.2.1 New construction. Where provided, bus stop pads shall have a firm, stable surface with a minimum clear length of 96 inches (2438 mm) (measured from the curb or vehicle roadway edge) and a minimum clear width of 60 inches (1524 mm) (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints. Bus stop pads shall connect to streets, sidewalks or pedestrian paths as part of an accessible route complying with Section 1114B.1.2. Newly constructed bus stop pads must provide a square curb surface between the pad and road or other detectable warning in accordance with Section 1133B.8.5.

Bus stop pads shall be at same slope as roadway in the direction parallel to roadway, and maximum 2 percent slope perpendicular to roadway.

Where provided, bus stop shelters shall be installed so as to permit a wheelchair user to enter the shelter from the public way and access a clear floor area of 30 by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4, completely within the shelter. Such shelters shall be connected by an accessible route to the boarding area. Where provided, all bus route identification signs shall comply with Section 1117B.5.1 Item 2.

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when

products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

## 1121B.2.2 Bus stop siting and alterations.

- 1. Bus stop sites shall be chosen such that the areas where lifts or ramps are to be deployed comply with Section 1121B.2.1.
- 2. When new bus route identification signs are installed or old signs are replaced, they shall comply with the requirements of Section 1121B.2.1.

#### 1121B.3 Fixed facilities and stations.

**1121B.3.1 New construction.** New stations in rapid rail, light rail, commuter rail, intercity bus, intercity rail, high speed rail, and other fixed guideway systems (for example, automated guideway transit, monorails, etc.) shall comply with the following provisions, as applicable:

- 1. Elements such as ramps, elevators or other circulation devices, fare vending or other ticketing areas, and fare collection areas shall be placed to minimize the distance which wheelchair users and other persons who cannot negotiate steps may have to travel compared to the general public. The circulation paths, each including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where a circulation path is different, signage complying with Section 1117B.5.1 Items 2 and 3 shall be provided to indicate direction to and identify the accessible entrance and accessible route.
- 2. If different entrances to a station serve different transportation fixed routes or groups of fixed routes, entrances serving each group or route shall comply with Section 1133B.1.
- 3. Direct connections to commercial, retail or residential facilities shall have an accessible route complying with Section 1114B.1.2 from the point of connection to boarding platforms and all transportation system elements used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements used by the public.
- 4. Where signs are provided at entrances to stations identifying the station or the entrance, or both, at least one sign at each entrance shall comply with Section 1117B.5.1 Item 1. Such signs shall be placed in uniform locations at entrances within the transit system.

**Exception:** Where the station has no defined entrance, but signage is provided, the accessible signage shall be placed in a central location.

- 5. Stations covered by this section shall have identification signs complying with Section 1117B.5.1 Item 2. Signs shall be placed at frequent intervals and shall be clearly visible from within the vehicle on both sides when not obstructed by another train. When station identification signs are placed close to vehicle windows (that is, on the side opposite from boarding) each shall have the top of the highest letter or symbol below the top of the vehicle window and the bottom of the lowest letter or symbol above the horizontal mid-line of the vehicle window.
- 6. Lists of stations, routes or destinations served by the station and located on boarding areas, platforms or mezzanines shall comply with Section 1117B.5.1 Item 2. A minimum of one sign identifying the specific station and complying with Section 1117B.5.1 Item 1 shall be provided on each platform or boarding area. All signs referenced in this paragraph shall be placed in uniform locations within the transit system.
- 7. Automatic fare vending, collection and adjustment (for example, add-fare) systems shall comply with Section 1117B.7. Such devices shall be located on an accessible route complying with Section 1114B.1.2.

If self-service fare collection devices are provided for the use of the general public, a minimum of 5 percent but not less than one accessible device for entering, and at least one for exiting, unless one device serves both functions, shall be provided at each location where such devices are provided.

Accessible fare collection devices shall have a minimum clear opening width of 32 inches (813 mm) and shall comply with the applicable requirements of Section 1117B.6.

Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches (51 mm) above the floor to 27 inches (686 mm) above the floor and shall comply with Sections 1133B.1 and 1133B.2.

- 8. Platform edges bordering a drop-off and not protected by platform screens or guards shall have a detectable warning. Such detectable warnings shall comply with the following provisions as applicable, and shall run the full length of the platform drop-off.
  - <sup>3</sup>(a) Detectable warnings at transit boarding platforms. Transit boarding platforms shall have a detectable warning texture extending the full length of the loading area. This detectable warning texture shall have the following features:

Width 24 to 36 inches (610 mm to 914 mm) placed at the edge of the drop-off or safe area.

Durable, slip-resistant material having a surface texture composed of raised, truncated domes in a staggered pattern with a diameter of nominal 0.9 inch (22.9 mm) at the base tapering to 0.45 inch (11.4 mm) at the top, a height of nominal 0.2 inch (5.08 mm), and a center-to-center spacing of nominal 2.35 inches (59.7 mm) in compliance with Figure 11B-23A. "Nominal" as used here shall be in accordance with California State Referenced Standards Code Sections 12-11A and B-102. The detectable warning shall contrast visually with adjoining surfaces, either light on dark or dark on light. The material used to provide contrast shall be an integral part of the walking surface. Warning surfaces shall differ from adjoining walking surfaces in resiliency or sound on cane contact. This surface shall be reserved for warning.

Color yellow conforming to Federal Color No. 33538, as shown in Table IV of Standard No. 595B. Where the color value contrast between the yellow warning and the main walking surface is less than 70 percent, a 1 inch-wide (25 mm) black strip shall separate the yellow warning from the main walking surface. Contrast shall be determined by:

Contrast =  $[(B1-B2/B1)] \times 100$  percent where B1 = light reflectance value (LRV) of the lighter area and B2 = light reflectance value (LRV) of the darker

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all

<sup>&</sup>lt;sup>3</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, Part 2, 2007 California Building Code – In 1121B.3.1-Item 8 - Indent subsection (a) as the 1<sup>st</sup> paragraph under item 8 and removed bold, the remaining 6-paragraphs should be indented as sub-paragraphs under paragraph (a). The 4<sup>th</sup> paragraph (Contrast =) should be indented as a sub-item under the 3<sup>rd</sup> paragraph (Color yellow ...).

occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

<sup>4</sup>(b) Detectable directional texture at boarding platforms. At transit boarding platforms, the pedestrian access shall be identified with a detectable directional texture. This detectable directional texture shall comply with Figure 11B-23B and shall be 0.1 inch (2.54 mm) in height that tapers off to 0.04 inch (1.02 mm), with bars raised 0.2 inch (5.08 mm) from the surface. The raised bars shall be 1.3 inches (33.02 mm) wide and 3 inches (76 mm) from center-to-center of each bar. This surface shall differ from adjoining walking surfaces in resiliency or sound on cane contact. The color of the directional texture shall comply with Section 1121B.3.1, item 8(a). This surface will be placed directly behind the yellow detectable warning texture specified in Section 1121B.3.1, item 8(a), aligning with all doors of the transit vehicles where passengers will embark. The width of the directional texture shall be equal to the width of the transit vehicle's door opening. The depth of the texture shall not be less than 36 inches (914 mm).

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

9. In stations covered by this section, rail-to-platform height in new stations shall be coordinated with the floor height of new vehicles so that the vertical difference, measured when the vehicle is at rest, is within plus or minus 5/8 inch (15.9 mm) under normal passenger load conditions.

For slow moving automated guideway "people mover" transit systems, the horizontal gap in new stations shall be no greater than 1 inch (25 mm).

#### Exceptions:

- Existing vehicles operating in new stations may have a vertical difference with respect to the new platform within plus or minus 1-1/2 inches (38 mm).
- In light rail, commuter rail and intercity rail systems where it is not operationally or structurally feasible to meet the horizontal gap or vertical difference requirements, mini-high platforms, carborne or platform-mounted lifts, ramps or bridge plates, or similar manually deployed devices, meeting the applicable requirements of 36 CFR Part 1192, or 49 CFR Part 38 shall suffice.
- 10. Stations shall not be designed or constructed so as to require persons with disabilities to board or alight from a vehicle at a location other than one used by the general public.
- 11. Illumination levels in the areas where signage is located shall be uniform and shall minimize glare on signs. Lighting along circulation routes shall be of a type and configuration to provide uniform illumination.

<sup>&</sup>lt;sup>4</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, Part 2, 2007 California Building Code – In 1121B.3.1-Item 8 - Indent subsection (b) as 2<sup>nd</sup> paragraph under item 8 and remove bold, the remaining 2 paragraphs should be indented as sub-paragraphs under paragraph (b).

- 12. Text Telephones. The following shall be provided in accordance with Sections 1117B.2.9.2 and 1117B.2.9.3:
  - (a) If an interior public pay telephone is provided in a transit facility (as defined by the federal Department of Transportation) at least one interior public text telephone shall be provided in the station.
  - (b) Where four or more public pay telephones serve a particular entrance to a rail station and at least one is in an interior location, at least one interior public text telephone complying with Sections 1117B.2.9.2 and 1117B.2.9.3 shall be provided to serve that entrance.
- 13. Where it is necessary to cross tracks to reach boarding platforms, the route surface shall be level and flush with the rail top at the outer edge and between rails, except for a maximum 2-1/2 inch (64 mm) gap on the inner edge of each rail to permit passage of wheel flanges. Such crossings shall comply with Section 1133B.8.5. Where gap reduction is not practicable, an above-grade or below-grade accessible route shall be provided.
- 14. Where public address systems are provided to convey information to the public in terminals, stations, or other fixed facilities, a means of conveying the same or equivalent information to persons with hearing loss or who are deaf shall be provided.
- 15. Where clocks are provided for use by the general public, the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with the background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with Section 1117B.5.4. Clocks shall be placed in uniform locations throughout the facility and system.
- 16. Where provided in below grade stations, escalators shall have a minimum clear width of 32 inches (813 mm). At the top and bottom of each escalator run, at least two contiguous treads shall be level beyond the comb plate before the risers begin to form. All escalator treads shall be marked by a strip of clearly contrasting color, 2 inches (51 mm) in width, placed parallel to and on the nose of each step. The strip shall be of a material that is at least as slip resistant as the remainder of the tread. The edge of the tread shall be apparent from both ascending and descending directions.
- 17. Where provided, elevators shall be glazed or have transparent panels to allow an unobstructed view both into and out of the car. Elevators shall comply with Section 1116B.

**Exception:** Elevator cars with a clear floor area in which a 60 inch (1524 mm) diameter circle can be inscribed may be substituted for the minimum car dimensions of Section 1116B and Figure 11B-40A.

- 18. Where provided, ticketing areas shall comply with Section 1122B.5, and the customer side of the baggage check-in area shall be accessible.
- Where provided, baggage check-in and retrieval systems shall be on an accessible route complying with Section 1114B.1.2 and shall have space immediately adjacent complying with Section 1118B.

If unattended security barriers are provided, at least one gate shall comply with Sections 1133B.1 and 1133B.2. Passageways containing security barriers shall comply with Section 1133B.2.3.4.

Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches (51 mm) above the floor to 27 inches (686 mm) above the floor.

**1121B.3.2 Existing facilities - alterations.** Alterations of transportation facilities shall comply with Section 1134B.

#### 1121B.4 Airports.

#### 1121B.4.1 New construction.

- Elements such as ramps, elevators or other vertical circulation devices, ticketing areas, security checkpoints or passenger waiting areas shall be placed to provide equitable travel distances for wheelchair users and other persons who cannot negotiate steps compared to the route for the general public.
- 2. The circulation paths, each including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where a circulation path is different, signage complying with Section 1117B.5.1 Items 2 and 3 shall be provided to indicate direction to and identify the accessible entrance and accessible route.
- 3. Where provided, ticketing areas shall comply with Section 1122B.5, and the customer side of the baggage check-in area shall be accessible.
- 4. Where public pay telephones are provided, and at least one is at an interior location, a public text telephone shall be provided in compliance with Sections 1117B.2.9.2 and 1117B.2.9.3. Additionally, if four or more public pay telephones are located in any of the following locations, at least one public text telephone shall also be provided in that location: (a) a main terminal outside the security areas; (b) a concourse within the security areas; or (c) a baggage claim area in a terminal.
- Where provided, baggage check-in and retrieval systems shall be on an accessible route complying with Section 1114B.1.2 and shall have space immediately adjacent complying with Section 1118B.

If unattended security barriers are provided, at least one gate shall comply with Sections 1133B.1 and 1133B.2. Passageways containing security barriers shall comply with Section 1133B.2.3.4.

Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches (51 mm) above the floor to 27 inches (686 mm) above the floor.

- 6. Terminal information systems which broadcast information to the general public through a public address system shall provide a means to provide the same or equivalent information to persons with a hearing loss or who are deaf. Such methods may include, but are not limited to, visual paging systems using video monitors and computer technology. For persons with certain types of hearing loss such methods may include, but are not limited to, an assistive listening system complying with Section 1104B.2.
- 7. Where clocks are provided for use by the general public the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with their background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with Section 1117B.5.4. Clocks shall be placed in uniform locations throughout the facility.

# SECTION 1122B FIXED OR BUILT-IN SEATING, TABLES, AND COUNTERS

**1122B.1 Minimum Number.** Where fixed or built-in seating, tables or counters are provided in accessible public use or common use areas, 5 percent, but never less than one, must be accessible as provided in this section. An accessible route of travel complying with Section 1114B.1.2 shall lead to and through such fixed or built-in seating areas or tables.

**1122B.2 Seating.** If seating spaces for persons in wheelchairs are provided at fixed tables or counters, clear floor space complying with Section 1118B.4 shall be provided. Such clear floor space shall not overlap knee space by more than 19 inches (483 mm) (see Figure 11B-13).

**1122B.3 Knee Clearance.** If seating for persons in wheelchairs is provided at fixed tables or counters, knee spaces at least 27 inches (686 mm) high, 30 inches (762 mm) wide and 19 inches (483 mm) deep shall be provided (see Figure 11B-13).

**Exception:** Knee clearance is not required at checkout counters or service counters.

**1122B.4 Height of Work Surfaces.** The tops of tables and counters shall be 28 inches to 34 inches (711 mm to 864 mm) from the floor or ground.

Where a single counter contains more than one transaction station, such as (but not limited to) a bank counter with multiple teller windows or a retail sales counter with multiple cash register stations, at least 5 percent, but never less than one, of each type of station shall be located at a section of counter that is at least 36 inches (914 mm) long and no more than 28 to 34 inches (711 to 864 mm) high.

1122B.5 Sales and Service Counters, Teller Windows, and Information Counters. In department stores and miscellaneous retail stores where counters have cash registers and are provided for sales or distribution of goods or services to the public, at least one of each type shall have a portion of the counter which is at least 36 inches (915 mm) in length with a maximum height of 34 inches (864 mm) above the finish floor and located on an accessible route complying with Section 1114B.1.2.

At ticketing counters, teller stations in a bank, registration counters in hotels and motels, box office ticket counters, and other counters that may not have a cash register but at which goods or services are sold or distributed, a portion of the main counter which is a minimum of 36 inches (915 mm) in length shall be provided with a maximum height of 34 inches (864 mm).

**Exception:** In existing buildings where it is determined that providing an accessible counter would create an unreasonable hardship, equivalent facilitation may consist of one of the following:

- 1. An auxiliary counter, in close proximity to the main counter, meeting these requirements may be provided.
- 2. Provision of a folding shelf attached to the main counter on which an individual with disabilities can write.

## SECTION 1123B ACCESS TO EMPLOYEE AREAS

**1123B.1 General.** Employee areas shall conform to all requirements of the Division of the State Architect-Access Compliance in the California Building Code, Plumbing Code and Electrical Code.

**1123B.2 Work stations.** Specific work stations need only comply with aisle width (Sections 1133B.6.1 and 1133B.6.2) and floors and levels (Section 1120B), and entryways shall be 32 inches (813 mm) in clear width.

**Exception:** Accessibility is not required to (1) observation galleries used primarily for security purposes; or (2) in nonoccupiable spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways or freight (nonpassenger) elevators, and frequented only by service personnel for repair purposes; such spaces include, but are not limited to, elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks.

## SECTION 1124B GROUND AND FLOOR SURFACES

- **1124B.1 General.** Ground and floor surfaces along accessible routes and in accessible rooms and spaces, including floors, walks, ramps, stairs and curb ramps, shall be stable, firm, slip resistant, and shall comply with this section.
- **1124B.2 Changes in level.** Changes in level up to 1/4 inch (6.4 mm) may be vertical and without edge treatment [see Figure 11B-5E (c)]. Changes in level between 1/4 inch (6.4 mm) and 1/2 inch (12.7 mm) shall be beveled with a slope no greater than 1:2 [see Figure 11B-5E (d)]. Changes in level greater than ½ inch (12.7 mm) shall be accomplished by means of a curb ramp, ramp, elevator or platform lift that complies with Sections 1127B.5, 1133B.5, 1116B.1 or 1116B.2, respectively.
- 1124B.3 Carpet. If carpet or carpet tile is used on a ground or floor surface, then it shall be securely attached; have a firm cushion, pad or backing or no cushion or pad; and have a level loop, textured loop; level-cut pile or level-cut/uncut pile texture. The maximum pile height shall be 1/2 inch (12.7 mm). See Figure 11B-7E (b). Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 1124B.2.
- **1124B.4 Gratings.** If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2 inch (12.7 mm) wide in one direction (see Figure 11B-7E). If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel (see Figure 11B-7E).

## SECTION 1125B STORAGE

- **1125B.1 General.** If fixed storage facilities such as cabinets, shelves, closets or drawers are provided where access is required by Section 109.1, at least one of each type shall comply with this section. Additional storage may be provided outside of the reach ranges shown in Figure 11B-5D.
- **1125B.2 Clear floor space.** A clear floor space at least 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4 that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities.
- **1125B.3 Height.** Accessible storage spaces shall be within at least one of the reach ranges specified in Sections 1118B.5 and 1118B.6. Clothes rods shall be a maximum of 54 inches (1372 mm) from the floor for a side approach (See Figure 11B-5D). Where the distance from the wheelchair to the clothes rod or shelf exceeds 10 inches (254 mm), as in closets without accessible doors, the height and depth to the rod or shelf shall comply with Figure 11B-5D.
- **1125B.4 Hardware.** Hardware for accessible storage facilities shall comply with Section 1117B.6. Touch latches and U-shaped pulls are acceptable.

## SECTION 1126B VENDING MACHINES AND OTHER EQUIPMENT

Spaces for vending machines and other equipment shall comply with Section 1118B and shall be located on an accessible route complying with Section 1114B.1.2. Controls for vending machines and other equipment shall comply with Section 1117B.6, "Controls and Operating Mechanisms."

## Division II - SITE ACCESSIBILITY

## SECTION 1127B EXTERIOR ROUTES OF TRAVEL

1127B.1 General. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits, and access to normal paths of travel, and where necessary to provide access, shall incorporate pedestrian ramps, curb ramps, etc. Access shall be provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones if provided, and public streets or sidewalks. When more than one building or facility is located on a site, accessible routes of travel complying with Section 1114B.1.2 shall be provided between buildings and accessible site facilities, accessible elements, and accessible spaces that are on the same site. The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site facilities and the accessible entrance to the site. If access is provided for pedestrians from a pedestrian tunnel or elevated walkway, entrances to the building from each tunnel or walkway must be accessible.

#### Exceptions:

- Where the enforcing agency determines that compliance with these regulations would create an unreasonable hardship because of topography, natural barriers, etc., an exception may be granted when equivalent facilitation is provided through the use of other methods and materials.
- In existing buildings, this section shall not apply in those conditions where, due to legal or physical constraints, the site of the project would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1127B.2 Design and construction.** When accessibility is required by this section, it shall be designed and constructed in accordance with this Building Code. See Section 1114B.1 for a list of applicable sections.

**1127B.3 Signs.** At every primary public entrance and at every major junction where the accessible route of travel diverges from the regular circulation path along or leading to an accessible route of travel, entrance or facility, there shall be a sign displaying the International Symbol of Accessibility. Signs shall indicate the direction to accessible building entrances and facilities and shall comply with the requirements found in Sections 1117B.5.1 Item 2 and 1117B.5.8.1.

1127B.4 Outside stairways. See Section 1133B.4.

#### 1127B.5 Curb ramps.

- 1. General. Curb ramps shall be constructed at each corner of street intersections and where a pedestrian way crosses a curb. Built-up curb ramps shall be located so that they do not project into vehicular traffic lanes. The preferred and recommended location for curb ramps is in the center of the crosswalk of each street corner. Where it is necessary to locate a curb ramp in the center of the curb return and the street surfaces are marked to identify pedestrian crosswalks, the lower end of the curb ramp shall terminate within such crosswalk areas. See Figure 11B-20C, Case E and Figure 11B-22.
- 2. **Width of curb ramps.** Curb ramps shall be a minimum of 4 feet (1219 mm) in width and shall lie, generally, in a single sloped plane, with a minimum of surface warping and cross slope.
- 3. Slope of curb ramps. The slope of curb ramps shall not exceed 1 unit vertical to 12 units horizontal (8.33-percent slope). The slope shall be measured as shown in Figure 11B-20E. Transitions from ramps to walks, gutters or streets shall be flush and free of abrupt change. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1 unit vertical to 20 units horizontal (5-percent slope) within 4 feet (1219 mm) of the top and bottom of the curb ramp. The slope of the fanned or flared sides of curb ramps shall not exceed 1 unit vertical to 10 units horizontal (10-percent slope).
- 4. **Level landing.** A level landing 4 feet (1219 mm) deep shall be provided at the upper end of each curb ramp over its full width to permit safe egress from the ramp surface, or the slope of the fanned or flared sides of the curb ramp shall not exceed 1 unit vertical to 12 units horizontal (8.33-percent slope).

- 5. **Finish.** The surface of each curb ramp and its flared sides shall comply with Section 1124B, Ground and Floor Surfaces, and shall be of contrasting finish from that of the adjacent sidewalk.
- 6. **Border.** All curb ramps shall have a grooved border 12 inches (305 mm) wide at the level surface of the sidewalk along the top and each side approximately 3/4 inch (19 mm) on center. All curb ramps constructed between the face of the curb and the street shall have a grooved border at the level surface of the sidewalk. See Figures 11B-19A and 11B-19B.
- 7. **Detectable warnings.** Curb ramps shall have a detectable warning that extends the full width and depth of the curb ramp, excluding the flared sides, inside the grooved border. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9 inch (22.9 mm) at the base tapering to 0.45 inch (11.4 mm) at the top, a height of nominal 0.2 inch (5.08 mm) and a center-to-center spacing of nominal 2.35 inches (59.7 mm) in compliance with Figure 11B-23A. "Nominal" here shall be in accordance with Section 12-11A and B-102, State Referenced Standards Code. The detectable warning shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. The material used to provide contrast shall be an integral part of the walking surface. The domes may be constructed in a variety of methods, including cast in place or stamped, or may be part of a prefabricated surface treatment.

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

- 8. **Obstructions.** Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.
- 9. **Diagonal curb ramps.** If diagonal (or corner-type) curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have 48 inches (1219 mm) minimum clear space as shown in Figure 11B-22 (c) and (d). If diagonal curb ramps are provided at marked crossings, the 48-inch (1219 mm) clear space shall be within the markings (see Figure 11B-22 (c) and (d)). If diagonal curb ramps have flared sides, they shall also have at least a 24 inch long (610 mm) segment of straight curb located on each side of the curb ramp and within the marked crossing [see Figure 11B-22 (c)].

#### Notes:

- 1. For additional curb details, see Figures 11B-19A and 11B-19B.
- 2. If distance from curb to back of sidewalk is too short to accommodate ramp and a 4-foot (1219 mm) platform as in Figure 11B-20A, Case A, the side walk may be depressed longitudinally as in Figure 11B-20A, Case B, or Figure 11B-20B, Case C, or may be widened as in Figure 11B-20B, Case D.
- 3. If sidewalk is less than 5 feet (1524 mm) wide, the full width of the sidewalk shall be depressed as shown in Figure 11B-20B, Case C.
- As an alternate to Figure 11B-20A, Case A, one ramp may be placed in the center of the curb return as in Figure 11B-20C, Case E.
- 5. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown on the plan to accommodate wheelchairs. See Figure 11B-22.
- If planting area width is equal to or greater than ramp length, ramp side slope distance equals 3 feet (914 mm). See Figure 11B-20D, Case G.
- 7. For Figure 11B-20C, Case F and Figure 11B-20D, Case G, the longitudinal portion of the sidewalk may need to be depressed as shown in Figure 11B-20A, Case B.

- 8. If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4 feet (1219 mm).
- The ramp shall have a 12 inch wide (305 mm) border with 1/4 inch (6 mm) grooves approximately 3/4 inch (19 mm) on center. See grooving detail, Figure 11B-20 D, Case H.

# SECTION 1128B PEDESTRIAN GRADE SEPARATION (OVERPASSES AND UNDERPASSES)

Pedestrian ramps on pedestrian grade separations shall comply with the requirements of Section 1133B.5 for ramps.

Cross slopes of walking surfaces shall be the minimum possible and shall not exceed 1/4 inch (6 mm) per foot (2.083-percent gradient). The slope of any appreciably warped walking surface shall not exceed 1 unit vertical in 12 units horizontal (8.33-percent slope) in any direction. Where pedestrian grade separations cross streets or other vehicular traffic ways, and where a street level crossing can reasonably and safely be used by persons with physical disabilities, there shall be provided conforming curb ramps and a usable pathway.

#### Exceptions:

- 1. When the grade differential of the walking surface of a pedestrian grade separation exceeds 14 feet (4267 mm) due to required height clearance and grade conditions, and the enforcing agency finds that because of right-of-way restrictions, topography or natural barriers, wheelchair accessibility or equivalent facilitation would create an unreasonable hardship, such accessibility need not be provided. However, the requirements in these regulations relating to other types of mobility shall be complied with.
- 2. For existing facilities, this section shall not apply where, due to legal or physical constraints, the site of the project will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

## SECTION 1129B ACCESSIBLE PARKING REQUIRED

1129B.1 General. Each lot or parking structure where parking is provided for the public as clients, guests or employees, shall provide accessible parking as required by this section. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel (complying with Section 1114B.1.2) from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances. Table 11B-6 establishes the number of accessible parking spaces required.

**1129B.2 Medical Care Outpatient Facilities.** At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with this section shall be provided in accordance with Table 11B-6 except as follows:

- 1. **Outpatient units and facilities.** Ten percent of the total number of parking spaces provided serve each such outpatient unit or facility.
- Units and facilities that specialize in treatment or services for persons with mobility impairments.
   Twenty percent of the total number of parking spaces provided serve each such unit or facility.

## TABLE 11B-6 SPACES REQUIRED

Establishes the number of accessible parking spaces required.

TOTAL NUMBER OF PARKING SPACES	MINIMUM REQUIRED		
IN LOT OR GARAGE	NUMBER OF SPACES		
1-25	1		
26-50	2		
51-75	3		
76-100	4		
101-150	5		
151-200	6		
201-300	7		
301-400	8		
401-500	9		
501-1,000	*		
1,001 and over	**		

<sup>\*</sup>Two percent of total.

1129B.3 Parking space size. Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:

- 1. **Dimensions.** Where single spaces are provided, they shall be 14 feet (4267 mm) wide and lined to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area lined to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. The loading and unloading access aisle shall be marked by a border painted blue. Within the blue border, hatched lines a maximum of 36 inches (914 mm) on center shall be painted a color contrasting with the parking surface, preferably blue or white. See Figure 11B-18A. Parking access aisles shall be part of an accessible route of travel (complying with Section 1114B.1.2) to the building or facility entrance. Parked vehicle overhangs shall not reduce the clear width of an accessible route. The minimum length of each parking space shall be 18 feet (5486 mm). The words NO PARKING shall be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (305 mm) high and located so that it is visible to traffic enforcement officials. See Figures 11B-18A, 11B-18B and 11B-18C.
- 2. Van space(s). One in every eight accessible spaces, but not less than one, shall be served by a loading and unloading access aisle 96 inches (2438 mm) wide minimum placed on the side opposite the driver's side when the vehicle is going forward into the parking space and shall be designated van accessible as required by Section 1129B.4. All such spaces may be grouped on one level of a parking structure. The loading and unloading access aisle shall be marked by a border painted blue. Within the blue border, hatched lines a maximum of 36 inches (914 mm) on center shall be painted a color contrasting with the parking surface, preferably blue or white. The words NO PARKING shall be painted on the ground within each eight-foot (2438 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (305 mm) high and located so that it is visible to traffic enforcement officials. See Figures 11B-18A, 11B-18B and 11B-18C.
- 3. Arrangement of parking space. In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. Also, the space shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. Pedestrian ways which are accessible to persons with disabilities shall be provided from each such parking space to related facilities, including curb cuts or ramps as needed. Ramps shall not encroach into any accessible parking space or the adjacent access aisle. The maximum cross slope in any direction of an accessible parking space and adjacent access aisle shall not exceed 2 percent.

Exceptions: See Figures 11B-18A through 11B-18C.

- Where the enforcing agency determines that compliance with any regulation of this section would create an unreasonable hardship, a variance or waiver may be granted when equivalent facilitation is provided.
- Parking spaces may be provided which would require a person with a disability to wheel or walk behind other than
  accessible parking spaces when the enforcing agency determines that compliance with these regulations or
  providing equivalent facilitation would create an unreasonable hardship. See Section 109.1.5.

<sup>\*\*</sup>Twenty plus one for each 100, or fraction over 1.001.

4. **Slope of parking space.** Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed one unit vertical to 50 units horizontal (2-percent slope) in any direction.

1129B.4 Identification of parking spaces for off-street parking facilities. Each parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of the International Symbol of Accessibility in white on dark blue background. The sign shall not be smaller than 70 square inches (4516 mm²) in area and, when in a path of travel, shall be posted at a minimum height of 80 inches (2032 mm) from the bottom of the sign to the parking space finished grade. Signs may also be centered on the wall at the interior end of the parking space. An additional sign or additional language below the symbol of accessibility shall state "Minimum Fine \$250". Spaces complying with Section 1129B.3, Item 2 shall have an additional sign stating "Van-Accessible" mounted below the symbol of accessibility. Signs identifying accessible parking spaces shall be located so they cannot be obscured by a vehicle parked in the space.

An additional sign shall also be posted in a conspicuous place at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space. The sign shall not be less than 17 inches by 22 inches (432 mm by 559 mm) in size with lettering not less than 1 inch (25 mm) in height, which clearly and conspicuously states the following:

"Unauthorized vehicles par	rked in designated accessible spaces not displaying disting	uishing placards or license
plates issued for persons	with disabilities may be towed away at owner's expense	<ol> <li>Towed vehicles may be</li> </ol>
reclaimed at	or by telephoning	

Blank spaces are to be filled in with appropriate information as a permanent part of the sign.

In addition to the above requirements, the surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes:

- 1. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant; or
- 2. By outlining a profile view of a wheelchair with occupant in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36 inches high by 36 inches wide (914 mm by 914 mm). See Figures 11B-18A through 11B-18C.

# SECTION 1130B PARKING STRUCTURES

All entrances to and vertical clearances within parking structures shall have a minimum vertical clearance of 8 feet 2 inches (2489 mm) where required for accessibility to accessible parking spaces.

#### Exceptions:

- Where the enforcing agency determines that compliance with Section 1130B would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided.
- This section shall not apply to existing buildings where the enforcing agency determines that, due to legal or physical constraints, compliance with these regulations or equivalent facilitation would create an unreasonable hardship. See Section 109.1.5.

# SECTION 1131B PASSENGER DROP-OFF AND LOADING ZONES

**1131B.1 Location.** When provided, passenger drop-off and loading zones shall be located on an accessible route of travel (complying with Section 1114B.1.2) and shall comply with 1131B.2.

1131B.2 Passenger loading zones.

- 1. General. Where provided, one passenger drop-off and loading zone shall provide an access aisle at least 60 inches (1524 mm) wide and 20 feet (6096 mm) long adjacent and parallel to the vehicle pull-up space. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2 percent) in all directions. If there are curbs between the access aisle and the vehicle pull-up space, a curb ramp shall be provided. Each passenger drop-off and loading zone designed for persons with disabilities shall be identified by a reflectorized sign, complying with 1117B.5.1 Items 2 and 3, permanently posted immediately adjacent to and visible from the passenger drop-off or loading zone stating "Passenger Loading Zone Only" and including the International Symbol of Accessibility, in white on dark blue background.
- Vertical clearance. Provide minimum vertical clearance of 114 inches (2896 mm) at accessible
  passenger loading zones and along at least one vehicle access route to such areas from site entrances
  and exits.

**1131B.3 Valet parking.** Valet parking facilities shall provide a passenger loading zone complying with Section 1131B.2 above and shall be located on an accessible route of travel (complying with Section 1114B.1.2) to the entrance of the facility. The parking space requirements of Sections 1129B through 1130B apply to facilities with valet parking.

1131B.4 Bus stop pads and shelters. See Section 1121B.2.1.

# SECTION 1132B OUTDOOR OCCUPANCIES

**1132B.1 General.** Outdoor occupancies shall be accessible as required in this chapter. See also the general requirements in Section 1114B.1.1.

**1132B.2 Parks and recreational areas.** The following parks and recreational areas shall comply with these regulations.

#### Exceptions:

- 1. In existing buildings, when the enforcing agency determines that compliance would create an unreasonable hardship, a variance shall be granted when equivalent facilitation is provided.
- Where the enforcing agency finds that, in specific areas, the natural environment would be materially damaged by compliance
  with these regulations, such areas shall be subject to these regulations only to the extent that such material damage would not
  occur.
- 3. Automobile access shall not be provided or paths of travel shall not be made accessible when the enforcing agency determines that compliance with these regulations would create an unreasonable hardship.
- Campsites. Campsites, a minimum of two and no fewer than three for each 100 campsites provided, shall
  be accessible by level path or ramp and shall have travel routes with slopes not exceeding 1 unit vertical
  in 12 units horizontal (8.33-percent slope) to sanitary facilities. Permanent sanitary facilities serving
  campgrounds shall be accessible to wheelchair occupants.
- Beaches, picnic areas. Beaches, picnic areas, day-use areas, vista points and similar areas shall be accessible.
- 3. **Sanitary facilities.** Sanitary facilities, to the extent that such facilities are provided, each public use area that is accessible to wheelchair occupants by automobile, walks or other paths of travel.
- 4. Boat docks. Boat docks, fishing piers, etc., shall be accessible.
- 5. **Parking lots.** Parking lots shall be provided with accessible parking spaces and with curb cuts leading to all adjacent walks, paths or trails.
- 6. **Trails and paths.** Trails, paths and nature walk areas, or portions of these, shall be constructed with gradients which will permit at least partial use by wheelchair occupants. Hard surface paths or walks shall be provided to serve buildings and other functional areas.

7. **Nature trails.** Nature trails and similar educational and informational areas shall be accessible to the blind by the provision of rope guidelines, raised Arabic numerals and symbols for identification, information signs, and related guide and assistance devices.

For museums, orientation buildings, visitor centers, office buildings, retail stores, restaurants, etc., and sanitary facilities serving these uses, see Sections 1104B through 1111B and sections listed in Section 1114B.1.1.

**1132B.3 Highway rest areas.** The specific standards of accessibility for highway rest areas and similar facilities shall be as follows in Section 1132B.3.1, subject to other provisions in these regulations.

**1132B.3.1 Permanent facilities.** At least one kind of permanent functional area or facility, as applicable, shall be accessible to persons with disabilities, including:

- 1. A sanitary facility for each sex.
- 2. At least one picnic table and one additional table for each 20 tables, or fraction thereof provided.
- 3. Information and display areas.
- 4. Drinking fountains.
- 5. At least one parking space.
- 6. Curb ramps conforming to Section 1127B.5 shall be provided at pedestrian ways where appropriate.

# Division III – ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL

This division includes additional requirements which supersede less restrictive requirements in Chapter 10 where access is required.

# SECTION 1133B GENERAL ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL

1133B.1 Building accessibility. See this chapter.

1133B.1.1 Entrances.

1133B.1.1.1 Entrances and exterior ground floor exit doors.

1133B.1.1.1.1 All entrances and exterior ground-floor exit doors to buildings and facilities shall be made accessible to persons with disabilities. Such entrances shall be connected by an accessible route (complying with Section 1114B.1.2) to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks if available. Entrances shall be connected by an accessible route to all accessible spaces or elements within the building or facility. Doorways shall have a minimum clear opening of 32 inches (813 mm) with the door open 90 degrees, measured between the face of the door and the opposite stop (see Figure 11B-5B). Openings more than 24 inches (610 mm) in depth shall comply with Section 1118B.

#### Exceptions:

- Exterior ground-floor exits serving smoke-proof enclosures, stairwells and exit doors servicing stairs only need not be made accessible.
- Exits in excess of those required by Chapter 10, and which are more than 24 inches (610 mm) above grade are not required to be accessible. Such doors shall have signs warning that they are not accessible. Warning signs shall comply with Section 1117B.5.1 Item 2.
- 3. In existing buildings where the enforcing agency determines that compliance with the building standards of this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided. Equivalent facilitation would require at least one entrance to be accessible to and usable by persons with disabilities.
- 4. These building standards shall not apply to existing buildings when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5, Special Conditions for Persons with Disabilities Requiring Appeals Action Ratification.
- **1133B.1.1.1.2 Temporary restrictions.** During periods of partial or restricted use of a building or facility, the entrances used for primary access shall be accessible to and usable by persons with disabilities.
- **1133B.1.1.1.3 Recessed doormats.** Recessed doormats shall be adequately anchored to prevent interference with wheelchair traffic.
- **1133B.1.1.1.4 Gates.** All gates, including ticket gates, shall meet all applicable specifications for doors.

#### 1133B.2 Doors.

1133B.2.1 Type of lock or latch. See Chapter 10, Section 1008.1.8.

**1133B.2.2 Width and height.** Every required exit doorway shall be of a size as to permit the installation of a door not less than 3 feet (914 mm) in width and not less than 6 feet 8 inches (2032 mm) in height.

When installed in exit doorways, exit doors shall be capable of opening at least 90 degrees and shall be so mounted that the clear width of the exitway is not less than 32 inches (813 mm) measured between the face of the door and the opposite stop (see Figure 11B-5B). In computing the exit width the net dimension of the exitway shall be used.

**Exception:** Doors not requiring full user passage, such as shallow closets, may have the clear opening reduced to 20 inches (510 mm) minimum.

**1133B.2.3 Hinged doors.** For hinged doors, the opening width shall be measured with the door positioned at an angle of 90 degrees from its closed position.

**1133B.2.3.1 Pairs of doors.** Where a pair of doors is utilized, at least one of the doors shall provide a clear, unobstructed opening width of 32 inches (813 mm) with the leaf positioned at an angle of 90 degrees from its closed position.

1133B.2.3.2 Automatic and power-assisted doors. If an automatic door is used, then it shall comply with BHMA A156.10. Slowly opening, low-powered, automatic doors shall comply with BHMA A156.19. Such doors shall not open to back check faster than 3 seconds and shall require no more than 15 lbf (66.72 N) to stop door movement. If a power-assisted door is used, its door-opening force shall comply with 1133B.2.5 and its closing shall conform to the requirements in BHMA A156.19. When an automatic door operator is utilized to operate a pair of doors, at least one of the doors shall provide a clear, unobstructed opening width of 32 inches (813 mm) with the door positioned at an angle of 90 degrees from its closed position.

#### Exceptions:

 The provisions of Section 1133B.2.3 shall not apply to existing buildings, except when otherwise required under conditions applicable to access for persons with disabilities. In existing buildings, the following shall apply:

Where the occupant load is less than 10, except Group I, Division 1 Occupancies, or where the occupant load is greater than 10 and it is determined that compliance with Section 1133B.2.3 would create an unreasonable hardship, a projection of 5/8 inch (16 mm) maximum will be permitted for the latch side stop.

In existing buildings, the provisions of this section shall not apply when legal or physical constraints
will not allow compliance with these building standards or equivalent facilitation without creating an
unreasonable hardship. See Section 109.1.5.

**1133B.2.3.3 Revolving doors.** Revolving doors shall not be used as a required entrance for persons with disabilities.

1133B.2.3.4 Turnstiles, rails and pedestrian controls. Where turnstiles and crowd control barriers are utilized in a facility for the purpose of providing fully controlled access, such as where an admission price is charged, a door or gate that is accessible to persons with disabilities shall be provided adjacent to each turnstile exit or entrance. This alternate passageway shall be maintained in an unlocked condition during business hours and the door or gate shall not activate a publicly audible alarm system. The door or gate may be latched where all gates are restricted and controlled by an attendant and a sign is posted stating, "All gates are restricted and controlled by an attendant". The accessible door or gate shall provide the same use pattern. Where posts, rails or other pedestrian controls are utilized to create crowd control aisles or lanes, a minimum of one lane shall be accessible and shall provide a minimum aisle width no less than indicated in Figure 11B-5E (a) and (b) with 32 inches (813 mm) of clear opening.

**Exception:** In existing buildings, Section 1133B.2.3 shall not apply when physical constraints or equivalent facilitation will not allow compliance with these building standards without creating an unreasonable hardship. See Section 109.1.5.

**1133B.2.4 Floor level at doors.** Regardless of the occupant load, there shall be a floor or landing on each side of a door.

**1133B.2.4.1 Thresholds.** The floor or landing shall not be more than  $\frac{1}{2}$  inch (12.7 mm) lower than the threshold of the doorway. Change in level between  $\frac{1}{4}$  inch (6 mm) and  $\frac{1}{2}$  inch (12.7 mm) shall be beveled with a slope no greater than 1 unit vertical to 2 units horizontal (50-percent slope). Change in level greater than  $\frac{1}{2}$  inch (12.7 mm) shall be accomplished by means of a ramp. See Section 1133B.5.1.

**1133B.2.4.2 Maneuvering clearances at doors.** Minimum maneuvering clearances at doors shall be as shown in Figure 11B-26A and 11B-26B. The floor or ground area within the required clearances shall be level and clear.

The level area shall have a length in the direction of door swing of at least 60 inches (1524 mm) and the length opposite the direction of door swing of 48 inches (1219 mm) as measured at right angles to the plane of the door in its closed position.

**Exception:** The length opposite the direction of door swing shall be a minimum of 44 inches (1118 mm) where the door has no closer and approach to the door by a person in a wheelchair can be made from the latch side, or if the door has neither latch nor closer and approach can be made from the hinge side. See Figure 11B-26A and 11B-26B.

**1133B.2.4.3** The width of the level area on the side to which the door swings shall extend 24 inches (610 mm) past the strike edge of the door for exterior doors and 18 inches (457 mm) past the strike edge for interior doors.

Twenty-four inches (610 mm) is preferred for strike-side clearance.

- 1133B.2.4.4 The space between two consecutive door openings in a vestibule, serving other than a required exit stairway shall provide a minimum of 48 inches (1219 mm) of clear space from any door opening into such vestibule when the door is positioned at an angle of 90 degrees from its closed position. Doors in a series shall swing either in the same direction or away from the space between the doors. See Figures 11B-30 and 11B-31.
- **1133B.2.4.5** Where a door required to be accessible by Section 1133B.1.1.1 is located in a recess or alcove where the distance from the face of the wall to the face of the door is greater than 8 inches, strike side clearances as prescribed in Section 1133B.2.4.3 shall be provided. See Figure 11B-33(a).
- **1133B.2.5 Closer-effort to operate doors.** Maximum effort to operate doors shall not exceed 5 pounds (22.2 N) for exterior and interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 pounds (66.72 N).
  - **1133B.2.5.1 Door closer.** If the door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches (75 mm) from the latch, measured to the leading edge of the door.
  - 1133B.2.5.2 Hand-activated door opening hardware, handles, pulls, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching or twisting of the wrist to operate. Hardware shall be centered between 30 inches (762 mm) and 44 inches (1118 mm) above the floor. Latching and locking doors that are hand-activated and which are in a path of travel shall be operable with a single effort by lever-type hardware, panic bars, push-pull activating bars or other hardware designed to provide passage. Locked exit doors shall operate as above in egress direction.

**1133B.2.5.3 Recessed doors.** Where the plane of the doorway is offset 8 or more inches (205 mm) from any obstruction within 18 inches (455 mm) measured laterally on the latch side, the door shall be provided with maneuvering clearance for front approach. See Figure 11B-33(a).

**1133B.2.6 Smooth surface.** The bottom 10 inches (254 mm) of all doors except automatic and sliding shall have a smooth, uninterrupted surface to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10-inch (254 mm) high smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition.

# 1133B.3 Corridors, hallways and exterior exit balconies.

**1133B.3.1 Corridor and hallway widths.** Every corridor and hallway serving an occupant load of 10 or more shall not be less than 44 inches (1118 mm) in width. Corridors and hallways serving an occupant load of less than 10 shall not be less than 36 inches (914 mm) in width.

1133B.3.2 Corridors and hallways over 200 feet (60 960 mm). Corridors and hallways that are located on an accessible route and exceed 200 feet (60 960 mm) in length shall have a minimum clear width of 60 inches (1524 mm), then passing spaces at least 60 inches by 60 inches (1524mmby 1524 mm) shall be located at reasonable intervals not to exceed 200 feet (60 960 mm). A "T" intersection of two corridors or walks is an acceptable passing place.

#### Exceptions:

- In existing buildings, when the enforcing agency determines that compliance with any building standard under this section would create an unreasonable hardship, an exception to such building standard shall be granted when equivalent facilitation is provided.
- In existing buildings, the provisions of this section shall not apply when legal or physical constraints will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

#### 1133B.4 Stairways.

#### 1133B.4.1 Handrails.

1133B.4.1.1 Required handrails. Stairways shall have handrails on each side, and every stairway required to be more than 88 inches (2235 mm) in width shall be provided with not less than one intermediate handrail for each 88 inches (2235 mm) of required width. Intermediate handrails shall be spaced approximately equally across with the entire width of the stairway. Handrails shall be continuous along both sides of a stairway.

#### 1133B.4.2 Handrail configuration.

**1133B.4.2.1** The top of handrail gripping surface shall be mounted between 34 to 38 inches (864 to 965 mm) above the nosing of the treads.

1133B.4.2.2 Handrails shall extend a minimum of 12 inches (305 mm) beyond the top nosing and 12 inches (305 mm), plus the tread width, beyond the bottom nosing. At the top, the extension shall be parallel with the floor or ground surface. At the bottom, the handrail shall continue to slope for a distance of the width of one tread from the bottom riser; the remainder of the extension shall be horizontal. See Figures 11B-35 and 11B-37.

#### Exceptions:

- 1. In new construction, the inside handrail on switchback or dogleg stairs shall always be continuous.
- In existing buildings and facilities, full extension of handrails at stairs shall not be required in alterations where such extensions would be hazardous or impossible due to plan configuration.

1133B.4.2.3 Ends shall be returned smoothly to floor, wall or post.

**1133B.4.2.4** The orientation of at least one handrail shall be in the direction of the run of the stair and perpendicular to the direction of the stair nosing, and shall not reduce the minimum required width of the stairs.

1133B.4.2.5 Handrails projecting from a wall shall have a space of 1-½ inches (38 mm) between the wall and the handrail.

Handrails may be located in a recess if the recess is a maximum of 3 inches (76 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. Handrails shall not rotate in their fittings.

1133B.4.2.6 Handgrips. The handgrip portion of handrails shall be not less than 1-½ inches (32 mm) nor more than 1-½ inches (38 mm) in cross-sectional nominal dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Gripping surfaces (top or sides) shall be uninterrupted by newel posts, other construction elements or obstructions. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3.2 mm).

#### Exceptions:

- In existing buildings when the enforcing agency determines that compliance with any requirement under Section 1133B.4.2 would create an unreasonable hardship, an exception to the requirement for persons with disabilities may be granted when equivalent facilitation is provided.
- These regulations shall not apply in existing buildings where legal or physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1133B.4.3 Tactile floor designation signs in stairways.** Tactile floor designation signs that comply with Section 1117B.5 Item 1 shall be located at each floor level landing in all enclosed stairways in buildings two or more stories in height to identify the floor level. At exit discharge level, the sign shall include a raised five pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.

1133B.4.4 Striping for the visually impaired. The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2 inches (51 mm) wide placed parallel to and not more than 1 inch (25.4 mm) from the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair.

Where stairways occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2 inches (51 mm) wide and placed parallel to and not more than 1 inch (25.4 mm) from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip resistant as the other treads of the stair. A painted strip shall be acceptable.

#### 1133B.4.5 Treads, nosing and risers.

**1133B.4.5.1 Treads.** All tread surfaces shall be slip resistant. Weather-exposed stairs and their approaches shall be designed so that water will not accumulate on the walking surfaces. Treads shall have smooth, rounded or chamfered exposed edges, and no abrupt edges at the nosing (lower front edge). The radius of curvature at the leading edge of the tread shall be no greater than  $\frac{1}{2}$  inch (13 mm).

**1133B.4.5.2 Nosing.** Nosing shall not project more than 1-½ inch (38 mm) past the face of the riser below.

1133B.4.5.3 Open risers are not permitted. On any given flight of stairs, all steps shall have uniform riser height and uniform tread widths consistent with Section 1133B.4. Stair treads shall be no less than 11 inches (279 mm) deep, measured from riser to riser. See Figure 11B-35. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal.

#### Exceptions:

- In existing buildings, when the enforcing agency determines that compliance with any requirement under this section would create an unreasonable hardship, an exception to persons with disabilities requirements may be granted when equivalent facilitation is provided.
- 2. These regulations shall not apply to existing buildings when legal or physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

#### 1133B.5 Ramps.

**1133B.5.1 General.** Ramps used as exits shall conform to the provisions of this section. Any accessible route of travel shall be considered a ramp if its slope is greater than 1 foot (305 mm) rise in 20 feet (6096 mm) of horizontal run (5-percent gradient).

**1133B.5.2 Width.** Pedestrian ramps shall have a minimum clear width of 48 inches (1219 mm), unless required to be wider by some other provision of this code. Pedestrian ramps serving entrances to buildings where the ramp is the only exit discharge path and serves an occupant load of 300 or more shall have a minimum clear width of 60 inches (1524 mm). Ramps serving Group R Occupancies may be 36 inches (914 mm) clear width when the occupant load is 50 or less.

**1133B.5.3 Slope.** The least possible slope shall be used for any ramp. The maximum slope of a ramp that serves any exit way, provides access for persons with physical disabilities or is in the accessible route of travel shall be 1-foot (305 mm) rise in 12 feet (3658 mm) of horizontal run (8.3-percent gradient). The maximum rise for any run shall be 30 inches (762 mm). Examples of ramp dimensions are as follows:

	MAXIMUM RISE		MAXIMUM HORIZONTAL PROJECTION	
SLOPE	inches	mm	feet	т
1:12 to < 1:16	30	760	30	9
1:16 to < 1:20	30	760	40	12

**1133B.5.3.1** The cross slope of ramp surfaces shall be no greater than 1 unit vertical in 50 units horizontal (2-percent slope).

1133B.5.4 Landings. Level ramp landings shall be installed as follows:

1133B.5.4.1 Location of landings. Level ramp landings shall be provided at the top and bottom of each ramp. Intermediate landings shall be provided at intervals not exceeding 30 inches (762 mm) of vertical rise and at each change of direction. Landings are not considered in determining the maximum horizontal distance of each ramp. Landings shall be level as specified in the definition of "level area" in Section 1102B.

1133B.5.4.2 Size of top and bottom landings. Top landings shall be not less than 60 inches (1524 mm) wide and shall have a length of not less than 60 inches (1524 mm) in the direction of ramp run. Landings at the bottom of ramps shall have a dimension in the direction of ramp run of not less than 72 inches (1829 mm).

- **1133B.5.4.3 Encroachment of doors.** Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76 mm) when fully open. See Figure 11B-39(b).
- **1133B.5.4.4 Strike edge extension.** The width of the landing shall extend 24 inches (610 mm) past the strike edge of any door or gate for exterior ramps and 18 inches (457 mm) past the strike edge for interior ramps.
- **1133B.5.4.5 Landing width.** At bottom and intermediate landings, the width shall be at least the same as required for the ramps.
- **1133B.5.4.6 Change of direction.** Intermediate and bottom landings at a change of direction in excess of 30 degrees shall have a dimension in the direction of ramp run of not less than 72 inches (1829 mm) to accommodate the handrail extension.
- **1133B.5.4.7 Other intermediate landings.** Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60 inches (1524 mm).
- **1133B.5.4.8** For existing ramps or ramps not covered by Section 1133B.5.4.1, landings shall be provided as set forth in Section 1133B.5.4.1.
- **1133B.5.4.9 Hazards.** Required ramps shall have a curb at least 2 inches (51 mm) high, or a wheel guide rail 2 to 4 inches (51 to 102 mm) high on each side of the ramp landing that has a vertical drop exceeding 4 inches (102 mm) and that is not bounded by a wall or fence.

# 1133B.5.5 Handrails for ramps.

1133B.5.5.1 Handrails are required on ramps that provide access if slope exceeds 1 foot (305 mm) rise in 20 feet (6096 mm) of horizontal run (5-percent gradient), except that at exterior door landings, handrails are not required on ramps less than 6 inches (152 mm) rise or 72 inches (1829 mm) in length. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34 to 38 inches (864 to 965 mm) above the ramp surface to the top of the handrails, shall extend a minimum of 1 foot (305 mm) beyond the top and bottom of the ramp and shall be parallel with the floor or ground surface. The inside handrail on switchback or dogleg ramps shall always be continuous. The ends of handrails shall be either rounded or returned smoothly to floor, wall or post. Handrails projecting from a wall shall have a space of 1-1/2 inches (38 mm) between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3 inches (76 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. The grip portion shall not be less than 1-1/4 inches (32 mm) nor more than 1-1/2 inches (38 mm) in cross-sectional nominal dimension or the shape shall provide an equivalent gripping surface, and all surfaces shall be smooth with no sharp corners. Handrails shall not rotate within their fittings. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3 mm).

#### Exceptions:

- 1. Handrails at ramps immediately adjacent to fixed seating in assembly areas are not required.
- 2. Curb ramps do not require handrails.

**1133B.5.5.1.1 Ramp handrails.** In existing buildings or facilities, where the extension of the handrail in the direction of the ramp run would create a hazard, the extension on the handrail may be turned 90 degrees to the run of the ramp.

**1133B.5.6 Wheel guides.** Where the ramp surface is not bounded by a wall, the ramp shall comply with Section 1133B.5.6.1 or 1133B.5.6.2.

**1133B.5.6.1** A guide curb a minimum of 2 inches (51 mm) in height shall be provided at each side of the ramp; or

**1133B.5.6.2** A wheel guide rail shall be provided, centered 3 inches (76 mm) plus or minus 1 inch (25 mm) above the surface of the ramp.

**1133B.5.7 Guards.** Ramps more than 30 inches (762 mm) above the adjacent ground shall be provided with guards that comply with Section 1013. Such guards shall be continuous from the top of the ramp to the bottom of the ramp.

**1133B.5.8 Outdoor ramps.** Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.

#### 1133B.6 Aisles.

**1133B.6.1 General.** Every portion of every building in which are installed seats, tables, merchandise, equipment or similar materials shall be provided with aisles leading to an exit.

**1133B.6.2 Width.** Every aisle shall not be less than 36 inches (914 mm) wide if serving only one side, and not less than 44 inches (1118 mm) wide if serving both sides.

#### 1133B.7 Walks and Sidewalks.

1133B.7.1 Continuous surface. Walks and sidewalks subject to these regulations shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2 inch (12.7 mm) (see Section 1133B.7.4), and shall be a minimum of 48 inches (1219 mm) in width. If a walk or sidewalk has less than 60 inch (1525 mm) clear width, then passing spaces at least 60 inches by 60 inches (1525 mm by 1525 mm) shall be located at reasonable intervals not to exceed 200 feet (61 m). A T-intersection is an acceptable passing place. Surfaces shall be slip-resistant as follows:

**Exception**: When, because of right-of-way restrictions, natural barriers or other existing conditions, the enforcing agency determines that compliance with the 48-inch (1219 mm) clear sidewalk width would create an unreasonable hardship, the clear width may be reduced to 36 inches (914 mm).

**1133B.7.1.1 Slopes less than 6 percent.** Surfaces with a slope of less than 6 percent gradient shall be at least as slip-resistant as that described as a medium salted finish.

1133B.7.1.2 Slopes 6 percent or greater. Surfaces with a slope of 6 percent gradient shall be slip-resistant.

1133B.7.1.3 Surface cross slopes. Surface cross slopes shall not exceed 1/4 inch (6 mm) per foot.

5except when the enforcing agency finds that due to local conditions it creates an unreasonable hardship, the cross slope shall be increased to a maximum of ½ (12.7 mm) per foot for distances not to exceed 20 feet (6096 mm) (4.16%).

Exception: When, because of right of way restrictions, natural barriers or other existing conditions, the enforcing agency determines that compliance with the 48 inch (1210 mm) clear sidewalk.

**1133B.7.2 Gratings.** Walks, sidewalks and pedestrian ways shall be free of gratings whenever possible. For gratings located in the surface of any of these areas, grid openings in gratings shall be limited to 1/2 inch (12.7 mm) in the direction of traffic flow.

<sup>&</sup>lt;sup>5</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, Part 2, 2007 California Building Code – in 1133B.7.1.3 in the 1<sup>st</sup> sentence, delete all text and Exception after the words '…exceed ¼ inch (6 mm) per foot.' as shown in strikeout. Exception is correctly shown in 1133B.7.1.

#### Exceptions:

- Where the enforcing agency determines that compliance with this section would create an unreasonable hardship, an exception may be granted when equivalent facilitation is provided.
- This section shall not apply in those conditions where, due to legal or physical constraints, the site of the project will not allow compliance with these building standards or equivalent facilitation without creating an unreasonable hardship. See Section 109.1.5.

**1133B.7.3 Five percent gradient.** When the slope in the direction of travel of any walk exceeds 1 unit vertical to 20 units horizontal (5-percent gradient), it shall comply with the provisions of Section 1133B.5.

1133B.7.4 Changes in level. Abrupt changes in level along any accessible route shall not exceed 1/2 inch (12.7 mm). When changes in level do occur, they shall be beveled with a slope no greater than 1 unit vertical to 2 units horizontal (50 percent), except that level changes not exceeding 1/4 inch (6 mm) may be vertical.

When changes in levels greater than 1/2 inch (12.7 mm) are necessary, they shall comply with the requirements for curb ramps. See Section 1127B.5.

1133B.7.5 Level areas. Walks shall be provided with a level area not less than 60 inches by 60 inches (1524 mm by 1524 mm) at a door or gate that swings toward the walk, and not less than 48 inches wide by 44 inches (1219 mm by 1118 mm) deep at a door or gate that swings away from the walk. Such walks shall extend 24 inches (610 mm) to the side of the strike edge of a door or gate that swings toward the walk. (For example, see Figure 11B-26B.)

**1133B.7.6 Walks with continuous gradients.** All walks with continuous gradients shall have level areas at least 5 feet (1524 mm) in length at intervals of at least every 400 feet (121 920 mm).

#### 1133B.8 Hazards.

**1133B.8.1 Warning curbs.** Abrupt changes in level, except between a walk or sidewalk and an adjacent street or driveway, exceeding 4 inches (102 mm) in a vertical dimension, such as at planters or fountains located in or adjacent to walks, sidewalks or other pedestrian ways, shall be identified by curbs projecting at least 6 inches (152 mm) in height above the walk or sidewalk surface to warn the blind of a potential drop off.

When a guard or handrail is provided, no curb is required when a guide rail is provided centered 3 inches (76 mm) plus or minus 1 inch (25 mm) above the surface of the walk or sidewalk, the walk is 5 percent or less gradient or no adjacent hazard exists.

**1133B.8.2 Overhanging obstructions.** Any obstruction that overhangs a pedestrian's way shall be a minimum of 80 inches (2032 mm) above the walking surface as measured from the bottom of the obstruction. Where a guy support is used parallel to a path of travel, including, but not limited to sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction as defined (see Figure 11B-28).

Hazards such as drop-offs adjacent to walk ways or overhanging obstructions can be dangerous to persons with sight problems. This section addresses these situations.

- 1133B.8.3 Detectable warnings at transit boarding platforms. See Section 1121B.3.1, Item 8(a).
- 1133B.8.4 Detectable directional texture at boarding platforms. See Section 1121B.3.1, Item 8(b).
- **1133B.8.5 Detectable warnings at hazardous vehicular areas.** If a walk crosses or adjoins a vehicular way, and the walking surfaces are not separated by curbs, railings or other elements between the pedestrian areas and vehicular areas, the boundary between the areas shall be defined by a continuous detectable warning which is 36 inches (914 mm) wide, complying with Section 1121B.3.1 Item 8(a).

Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

# 1133B.8.6 Protruding objects.

1133B.8.6.1 General. Objects projecting from walls (for example, telephones) with their leading edges between 27 inches (686 mm) and 80 inches (2032 mm) above the finished floor shall protrude no more than 4 inches (102 mm) into walks, halls, corridors, passageways or aisles. Objects mounted with their leading edges at or below 27 inches (686 mm) above the finished floor may protrude any amount. Free-standing objects mounted on posts or pylons may overhang 12 inches (305 mm) maximum from 27 inches (686 mm) to 80 inches (2032 mm) above the ground or finished floor. Protruding objects shall not reduce the clear width of an accessible route or maneuvering space. See Figure 11B-7A.

**1133B.8.6.2 Head room.** Walks, halls, corridors, passageways, aisles or other circulation spaces shall have 80 inches (2032 mm) minimum clear head room. If vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches (nominal dimension), a barrier to warn blind or visually-impaired persons shall be provided. See Figures 11B-7A and 11B-7C.

**1133B.8.6.3 Free-standing signs.** Wherever signs mounted on posts or pylons protrude from the posts or pylons and the bottom edge of the sign is at less than 80 inches (2032 mm) above the finished floor or ground level, the edges of such signs shall be rounded or eased and the corners shall have a minimum radius of 0.125 inches.

#### Division IV - ACCESSIBILITY FOR EXISTING BUILDINGS

#### SECTION 1134B ACCESSIBILITY FOR EXISTING BUILDINGS

**1134B.1 Scope.** The provisions of this division apply to renovation, structural repair, alteration and additions to existing buildings, including those identified as historic buildings. This division identifies minimum standards for removing architectural barriers, and providing and maintaining accessibility to existing buildings and their related facilities.

1134B.2 General. All existing buildings and facilities, when alterations, structural repairs or additions are made to such buildings or facilities, shall comply with all provisions of Division I, New Buildings, except as modified by this division. These requirements shall apply only to the area of specific alteration, structural repair or addition and shall include those areas listed below:

**1134B.2.1** A primary entrance to the building or facility and the primary path of travel to the specific area of alteration, structural repair or addition, and sanitary facilities, drinking fountains, signs and public telephones serving the area.

#### Exceptions:

- When the total construction cost of alterations, structural repairs or additions does not exceed a valuation threshold of \$50,000, based on January 1981, "ENR US20 Cities" Average construction cost index of 3372.02 (Engineering News Record, McGraw Hill Publishing Company), and the enforcing agency finds that compliance with this code creates an unreasonable hardship, compliance shall be limited to the actual work of the project. The enforcing agency shall annually update the valuation threshold to a current amount based on the increase in the index since the last figure used. (For example, the January 2006 amount is \$113,586.07.) For purposes of this exception, an unreasonable hardship exists where the cost of providing an accessible entrance, path of travel, sanitary facilities, public phones and drinking fountains, is disproportionate to the cost of the project; that is, where it exceeds 20 percent of the cost of the project without these features. Where the cost of alterations necessary to make these features fully accessible is disproportionate, access shall be provided to the extent that it can be without incurring disproportionate cost. In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access in the following order:
  - 1.1. An accessible entrance,
  - 1.2. An accessible route to the altered area,
  - 1.3. At least one accessible restroom for each sex,
  - 1.4. Accessible telephones,
  - 1.5. Accessible drinking fountains, and
  - 1.6. When possible, additional accessible elements such as parking, storage and alarms.

The obligation to provide access may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking. If an area has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area or a different area on the same path of travel are undertaken within three years of the original alteration, the total cost of alterations to the areas on that path of travel during the preceding three-year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate. Only alterations undertaken after January 26, 1992, shall be considered in determining if the cost of providing an accessible path of travel is disproportionate to the overall cost of the alterations.

- 2. Certain types of privately funded, multistory buildings and facilities were formerly exempt from accessibility requirements above and below the first floor under this code, but as of the effective date of this regulation are no longer exempt due to more restrictive provisions in the federal Americans with Disabilities Act. In alteration projects involving buildings and facilities previously approved and built without elevators, areas above and below the ground floor are subject to the 20 percent disproportionality provisions described in Exception 1, above, even if the value of the project exceeds the valuation threshold in Exception 1. The types of buildings and facilities are:
  - 2.1 Office buildings and passenger vehicle service stations of three stories or more and 3,000 or more square feet (279m²) per floor.
  - 2.2 Offices of physicians and surgeons.

- 2.3 Shopping centers.
- 2.4 Other buildings and facilities three stories or more and 3,000 or more square feet (279 m²) per floor if a reasonable portion of services sought and used by the public is available on the accessible level.

For the general privately funded multistory building exception applicable to new construction and alterations, see Section 1103B.1, Exception 2.

The elevator exception set forth in this section does not obviate or limit in any way the obligation to comply with the other accessibility requirements in this code. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor.

- 3. Alterations, structural repairs or additions consisting of one or more of the following shall be limited to the actual work of the project:
  - 3.1 Altering one building entrance to meet accessibility requirements.
  - 3.2 Altering one existing toilet facility to meet accessibility requirements.
  - 3.3 Altering existing elevators to meet accessibility requirements.
  - 3.4 Altering existing steps to meet accessibility requirements.
  - 3.5 Altering existing handrails to meet accessibility requirements.
  - 3.6 Alteration solely for the purpose of removing barriers undertaken pursuant to the requirements of Sections 36.402 and 36.404 through 36.406 of Title III of the Department of Justice regulations promulgated pursuant to the Americans with Disabilities Act (Public Law 101-336, 28 C.F.R. Section 36.402, 28 C.F.R. Section 36.404, 28 C.F.R. Section 36.405, and 28 C.F.R. 36.406) or the accessibility requirements of this code as those requirements or regulations now exist or are hereafter amended, including the following:
    - 3.6.1. Installing ramps 3.6.2. Making curb cuts in sidewalks and entrance 3.6.3. Repositioning shelves 3.6.4. Rearranging tables, chairs, vending machines, display racks, and other Furniture 3.6.5. Repositioning telephones 3.6.6 Adding raised markings on elevator control buttons 3.6.7. Installing flashing alarm lights 3.6.8. Widening doors 3.6.9. Installing offset hinges to widen doorways 3.6.10. Eliminating a turnstile or providing an alternative accessible path 3.6.11. Installing accessible door hardware 3.6.12. Installing grab bars in toilet stalls 3.6.13. Rearranging toilet partitions to increase maneuvering space
    - 3.6.16. Installing a full-length bathroom mirror
      3.6.17. Repositioning the paper towel dispenser in a bathroom
      3.6.18. Creating designated accessible parking spaces

Installing a raised toilet seat

Insulating lavatory pipes under sinks to prevent burns

3.6.14.

3.6.15.

- 3.6.19. Installing an accessible paper cup dispenser at an existing inaccessible water fountain
- 3.6.20. Removing high-pile, low-density carpeting
- 3.6.21. Installing vehicle hand controls.
- 3.7 Altering existing parking lots by resurfacing and/or restriping
- 4. Projects which consist only of heating, ventilation, air conditioning, reroofing, electrical work not involving placement of switches and receptacles, cosmetic work that does not affect items regulated by this code, such as painting, equipment not considered to be a part of the architecture of the building or area, such as computer terminals, office equipment, etc., are not considered alteration projects for the purposes of accessibility for persons with disabilities and shall not be subject to this code unless they affect the usability of the building or facility. For the purposes of this section, the term "construction cost" does not include building permit fees or discretionary permit fees.

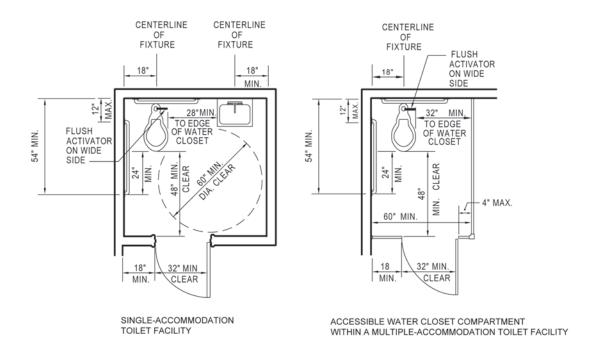
The only purpose of this exception is to exclude projects from activating the provisions of this section. The exceptions are not intended to relieve projects from complying with other applicable provisions of this code (e.g., replacement of carpet does not activate the provisions of this section; however, it still must comply with Section 1124B.3).

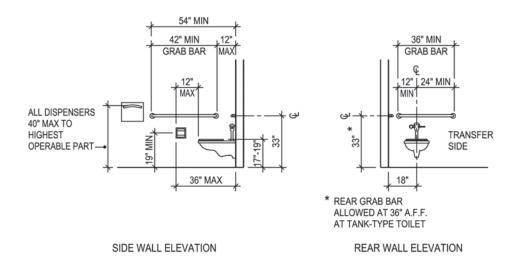
**1134B.2.2** Where it is technically infeasible in the area of an alteration to make existing toilet facilities code compliant and to install separate toilet facilities for each sex, then the installation of at least one unisex toilet facility per floor being altered, located in the same area as existing toilet facilities, will be permitted. Such a facility shall meet the requirements of Section 1115B.3.2.

# SECTION 1135B HISTORIC PRESERVATION – SPECIAL STANDARDS OF ACCESSIBILITY FOR BUILDINGS WITH HISTORICAL SIGNIFICANCE

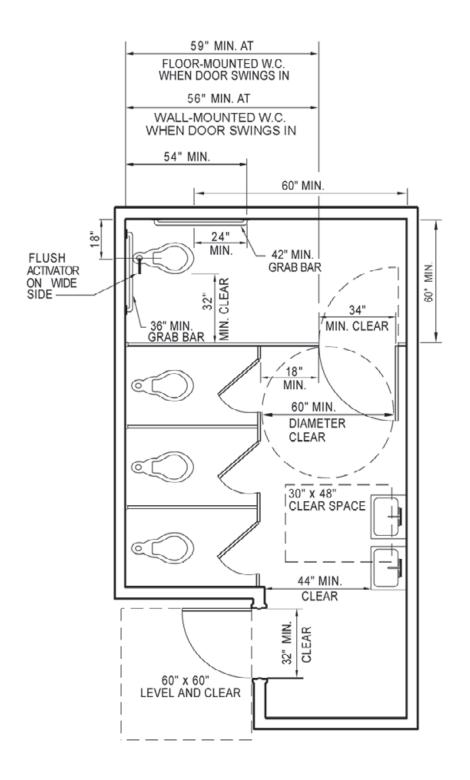
**1135B.1 General.** Qualified historical buildings shall comply with the State Historical Building Code, Part 8, Title 24, of the California Code of Regulations.

FIGURES 11B-1A through 11B-40D

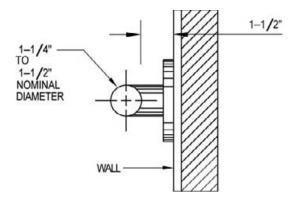




THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION



THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION



THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11B-1C—TYPICAL GRAB BAR SECTION

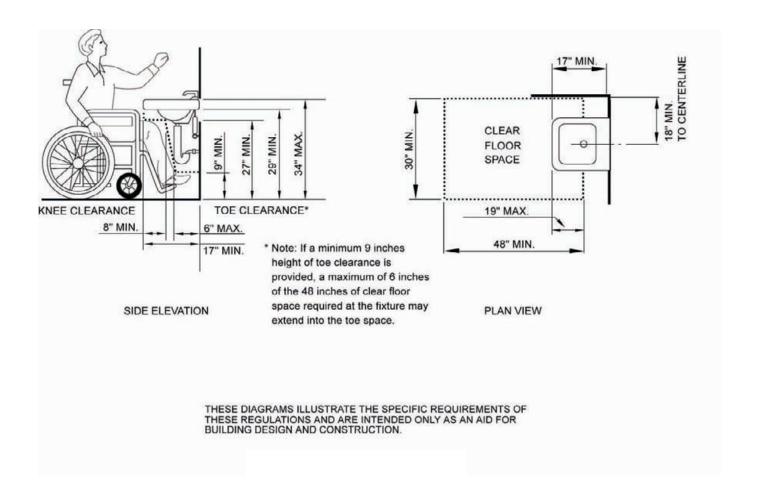


FIGURE 11B-1D—KNEE CLEARANCE

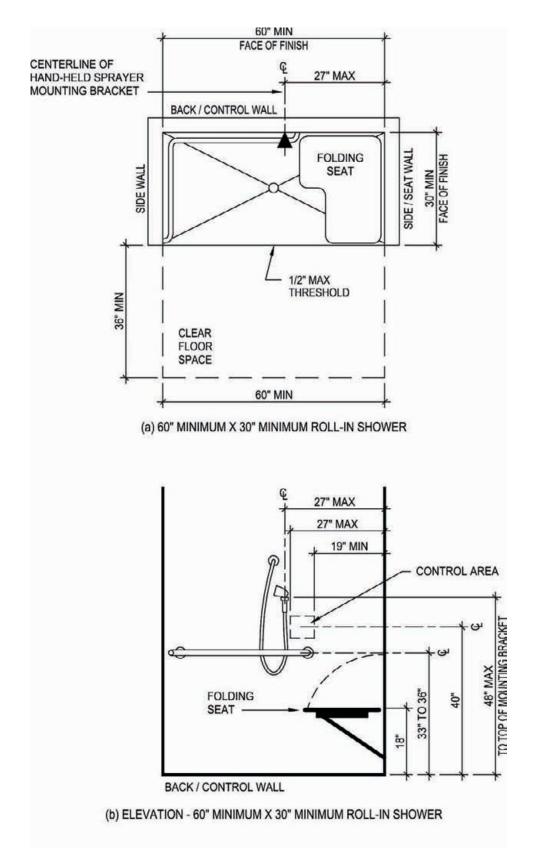


FIGURE 11B-2A—SHOWER STALLS

(continued)

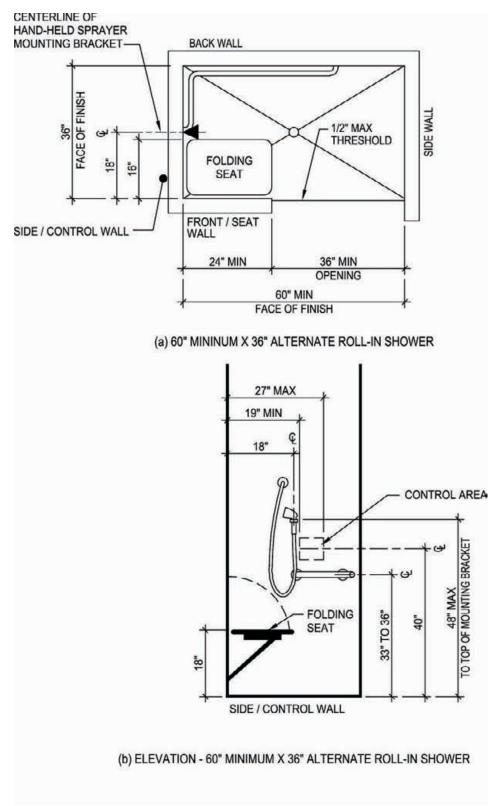
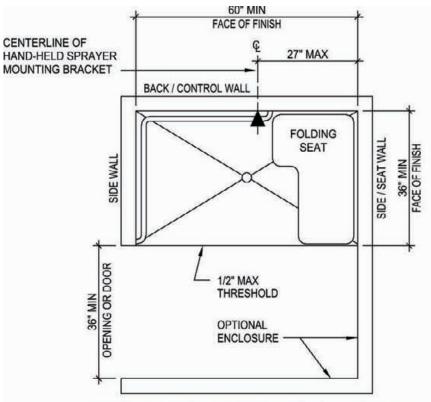
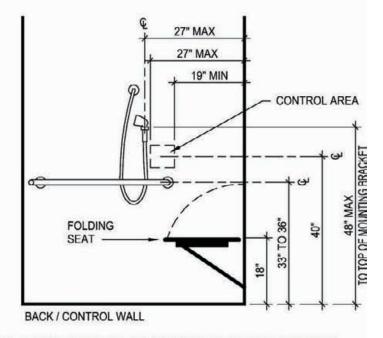


FIGURE 11B-2B—SHOWER STALLS—continued



(a) 60" MINIMUM X 36" MINIMUM ALTERNATE ROLL-IN SHOWER WITH OPTIONAL ENCLOSURE



(b) ELEVATION - 60" MINIMUM X 36" MINIMUM ALTERNATE ROLL-IN SHOWER WITH OPTIONAL ENCLOSURE

FIGURE 11B-2C—SHOWER STALLS—continued

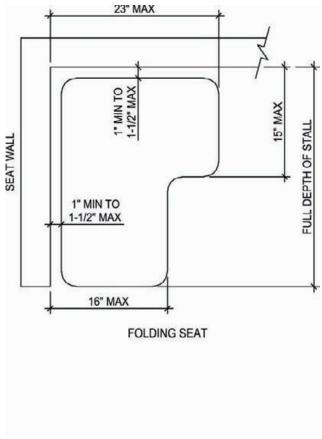
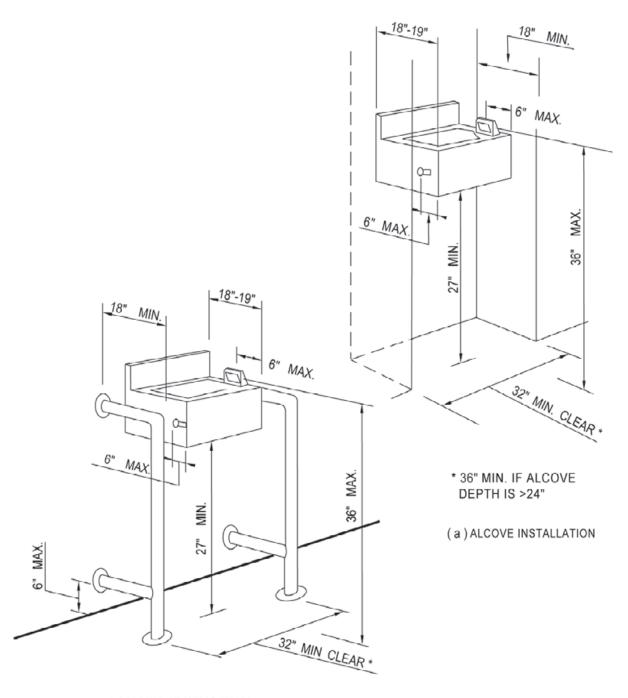


FIGURE 11B-2D—SHOWER SEAT



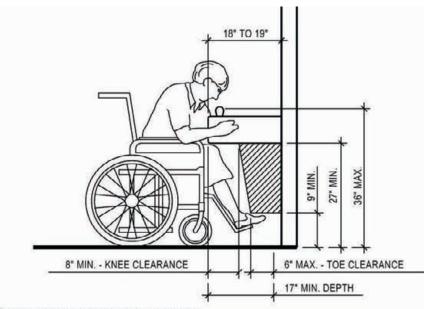
\* 36" MIN. IF WING WALL DEPTH IS >24"

(b) NONALCOVE WING WALL INSTALLATION

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

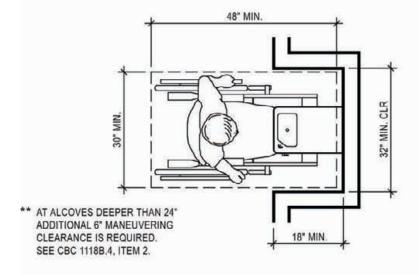
FIGURE 11B-3A—DRINKING FOUNTAINS

(continued)



\* EQUIPMENT PERMITTED IN SHADED AREA

#### SPOUT HEIGHT AND KNEE CLEARANCE AT DRINKING FOUNTAINS



CLEAR FLOOR SPACE AT DRINKING FOUNTAIN ALCOVES

FIGURE 11B-3B—DRINKING FOUNTAINS—continued

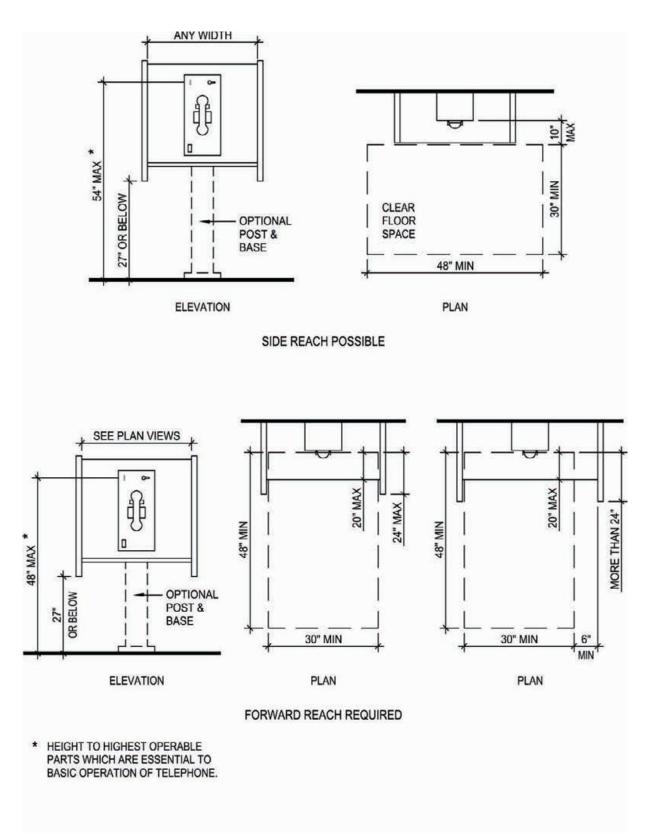
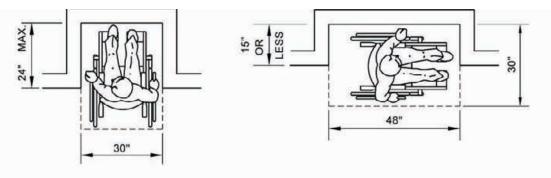
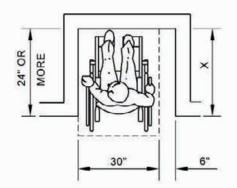


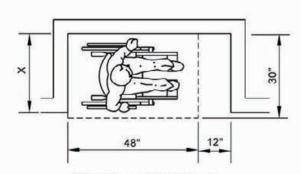
FIGURE 11B-4—MOUNTING HEIGHTS AND CLEARANCES FOR TELEPHONES



## (a) CLEAR FLOOR SPACE IN ALCOVES

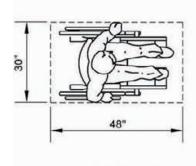


NOTE: IF X > 24 INCHES, THEN AN ADDITIONAL MANEUVERING CLEARANCE OF 6 INCHES SHALL BE PROVIDED AS SHOWN.

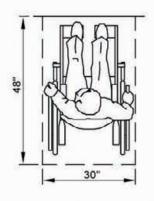


NOTE: IF X > 15 INCHES, THEN AN ADDITIONAL MANEUVERING CLEARANCE OF 12 INCHES SHALL BE PROVIDED AS SHOWN.

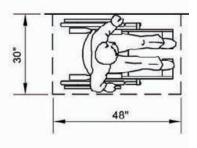
## (b) ADDITIONAL MANEUVERING CLEARANCE FOR ALCOVES



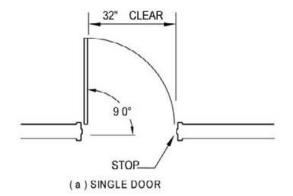
(c) CLEAR FLOOR SPACE



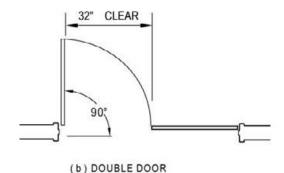
(d) FORWARD APPROACH



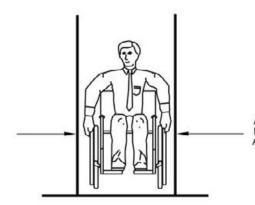
(e) PARALLEL APPROACH



CLEAR OPENINGS MUST BE BETWEEN THE DOOR IN ITS 90° OPENING POSITION AND THE FACE OF THE STOP

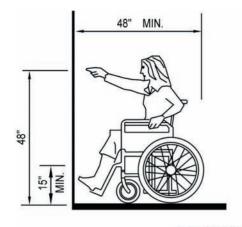


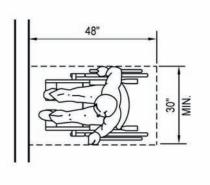
CLEAR OPENINGS FOR TWO LEAF DOORS MUST BE BETWEEN EITHER DOOR IN ITS 90° OPEN POSITION AND THE EDGE OF THE OTHER DOOR.



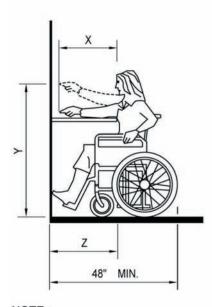
AN ADULT SIZE WHEELCHAIR AVERAGES 27 INCHES IN WIDTH. THE REQUIRED 32 INCH CLEAR OPENING ALLOWS 2-1/2 INCHES ON EACH SIDE FOR HANDS.

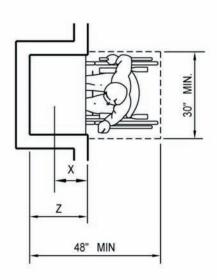
(c) PASSAGE CLEARANCE





(a) HIGH FORWARD REACH LIMIT

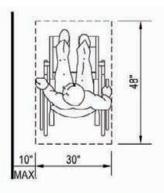


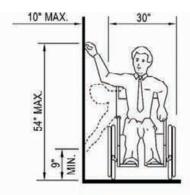


NOTE: X SHALL BE LESS THAN OR EQUAL TO 25 INCHES. Z SHALL BE GREATER THAN OR EQUAL TO X. WHEN X IS LESS THAN 20 INCHES, THEN Y SHALL BE 48 INCHES MAXIMUM. WHEN X IS 20 TO 25 INCHES, THEN Y SHALL BE 44 INCHES MAXIMUM.

( b ) MAXIMUM FORWARD REACH OVER AN OBSTRUCTION

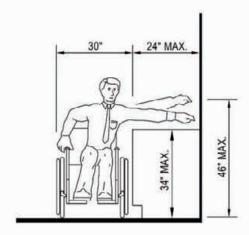
FIGURE 11B-5C—FORWARD REACH



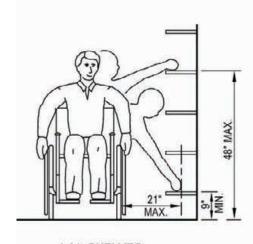


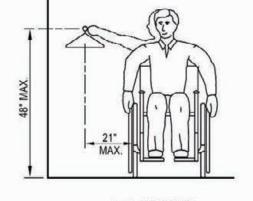
(a) CLEAR FLOOR SPACE PARALLEL APPROACH

(b) HIGH AND LOW SIDE REACH LIMITS



## (c) MAXIMUM SIDE REACH OVER OBSTRUCTION





(d) SHELVES

(e) CLOSETS

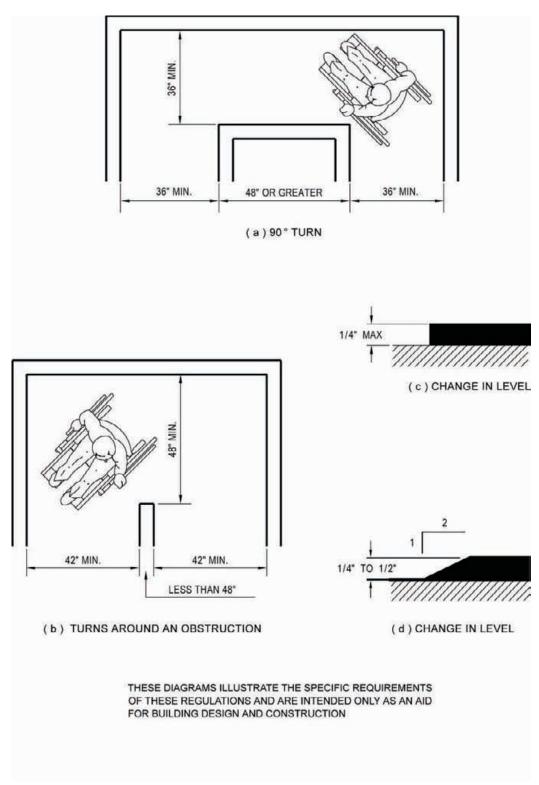
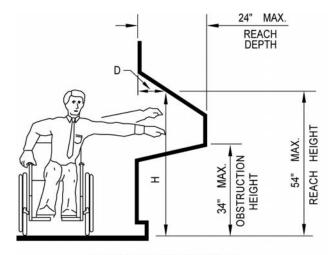


FIGURE 11B-5E—WIDTH OF ACCESSIBLE ROUTE



(d) ATM REACH RANGE LIMITS

# CORRESPONDING REACH HEIGHTS FOR GIVEN DEPTHS:

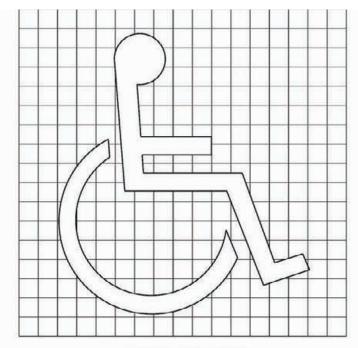
```
WHEN D = 10" OR LESS, H = 54" MAX. WHEN D = 10", H = 53.5" MAX. WHEN D = 12", H = 53.0" MAX.
WHEN D = 13", H =
                                        52.5"
                                                  MAX.
WHEN D = 14", H = WHEN D = 15", H = WHEN D = 16", H =
                                        51.5"
                                                  MAX.
                                        51.0"
                                                  MAX.
                                        50.5"
                                                  MAX.
WHEN D = 17", H = WHEN D = 18", H = WHEN D = 19", H =
                                        50.0"
                                                  MAX.
                                        49.5"
                                                  MAX.
                                        49.0"
                                                  MAX.
WHEN D = 20", H = 48.5"

WHEN D = 21", H = 47.5"

WHEN D = 22", H = 47.0"
                                                  MAX.
                                                  MAX.
                                                  MAX.
WHEN D = 23", H = 46.5"
WHEN D = 24", H = 46.0"
                                                  MAX.
                                                  MAX.
```

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11B-5F—ATM REACH RANGE LIMITS



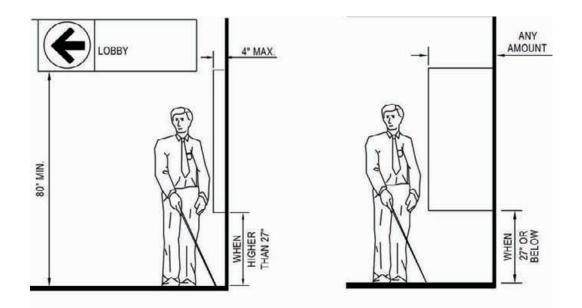
(a) SYMBOL PROPORTIONS





(b) DISPLAY CONDITIONS

FIGURE 11B-6—INTERNATIONAL ACCESSIBILITY SYMBOL



## WALKING PARALLEL TO A WALL



WALKING PERPENDICULAR TO WALL

FIGURE 11B-7A—PROTRUDING OBJECTS

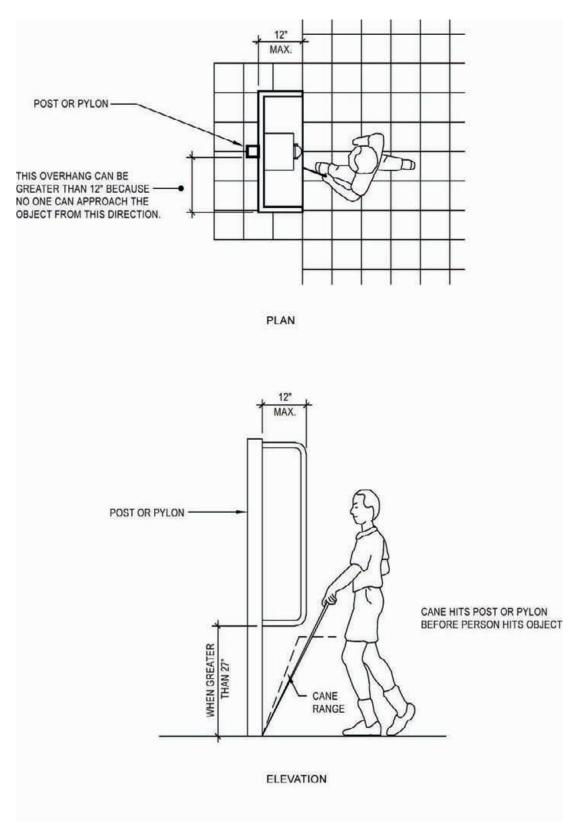


FIGURE 11B-7B—OBJECTS MOUNTED ON POSTS OR PYLONS

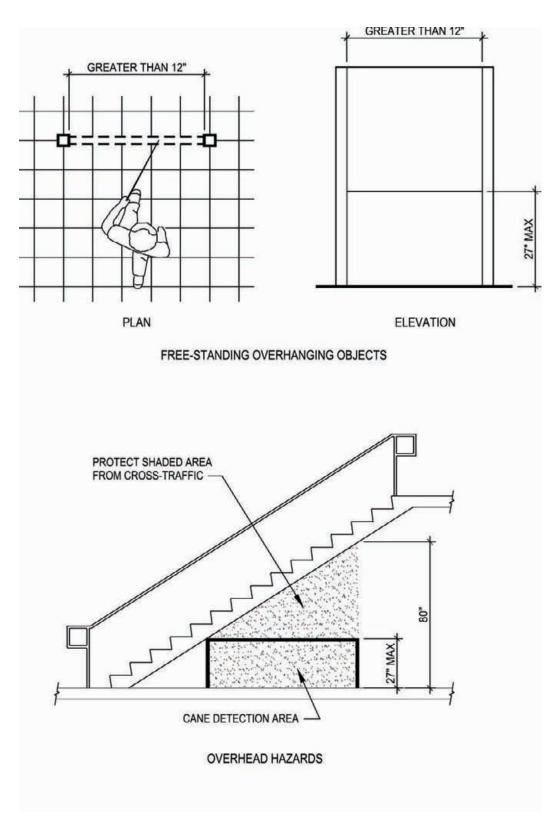


FIGURE 11B-7C—OVERHANGING AND OVERHEAD HAZARDS

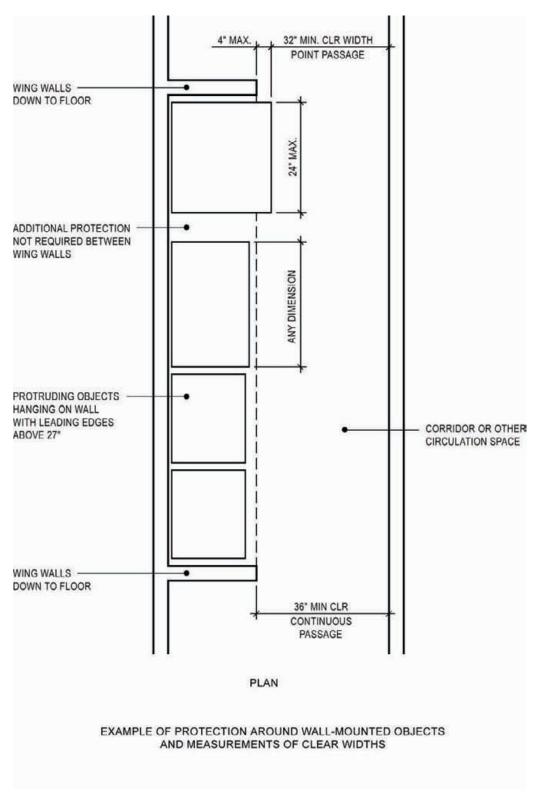
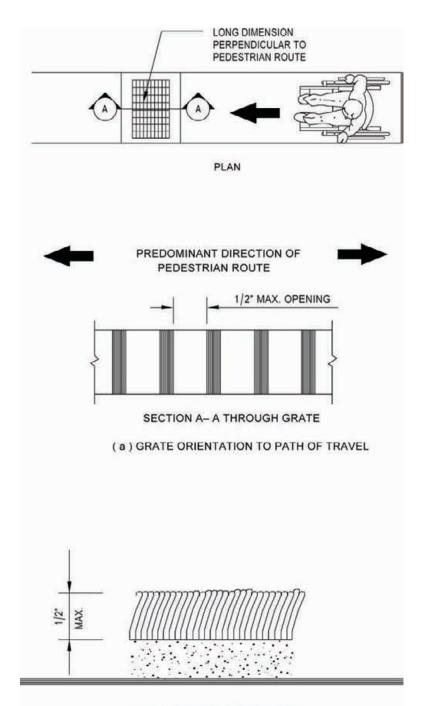


FIGURE 11B-7D—PROTECTION AROUND WALL-MOUNTED OBJECTS



(b) CARPET PILE THICKNESS

FIGURE 11B-7E

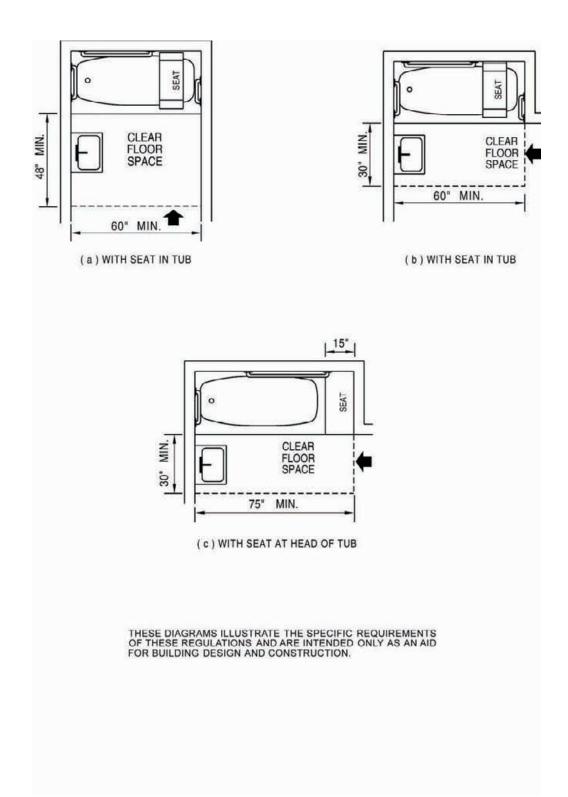
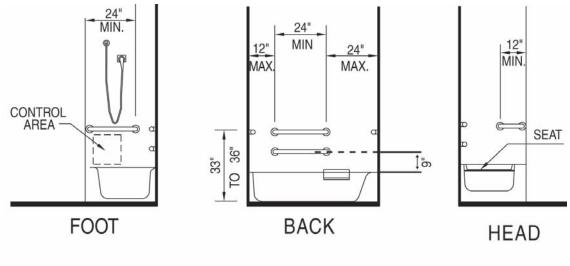
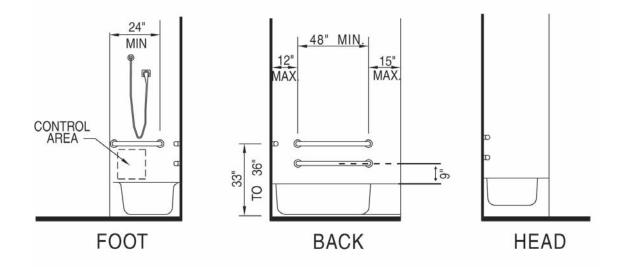


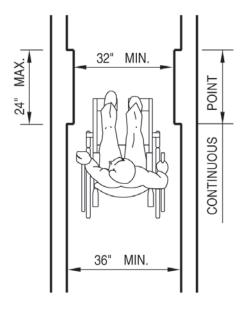
FIGURE 11B-8—CLEAR FLOOR SPACE AT BATHTUBS



(a) WITH SEAT IN TUB



(b) WITH SEAT AT HEAD OF TUB



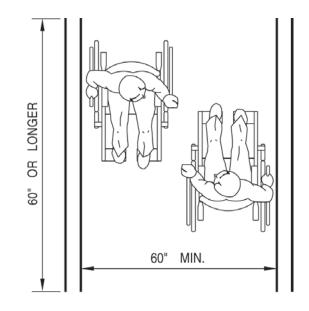
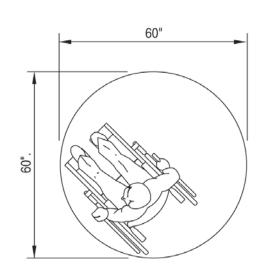
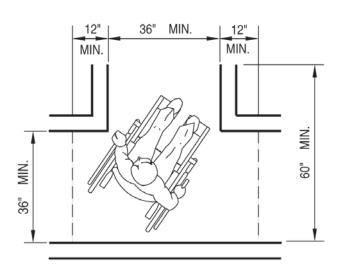


FIGURE 11B-10—MINIMUM CLEAR WIDTH FOR SINGLE WHEELCHAIR

FIGURE 11B-11—MINIMUM CLEAR WIDTH FOR TWO WHEELCHAIRD





(a) 60 INCHES DIAMETER SPACE

(b) T-SHAPED SPACE FOR 180° TURNS

FIGURE 11B-12—WHEELCHAIR TURNING SPACE

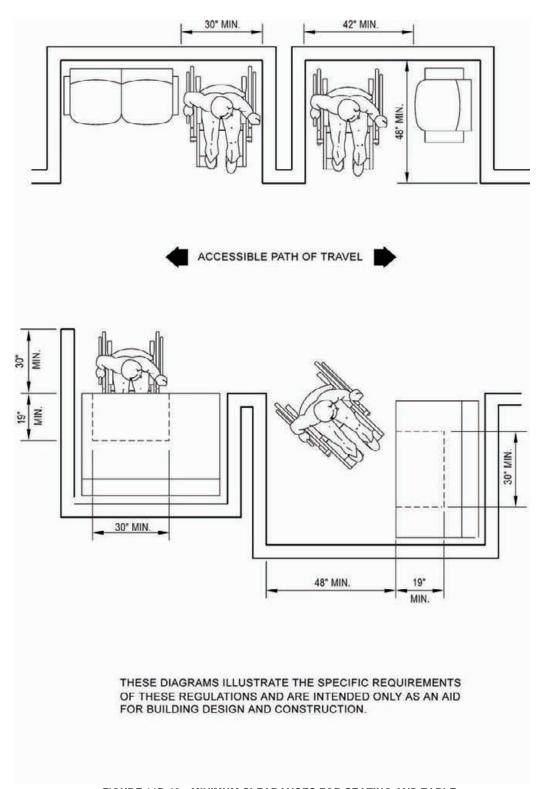


FIGURE 11B-13—MINIMUM CLEARANCES FOR SEATING AND TABLE



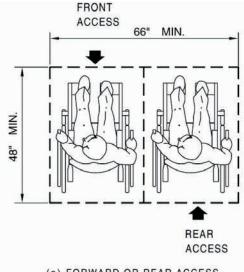
FIGURE 11B-14A—INTERNATIONAL TTY SYMBOL



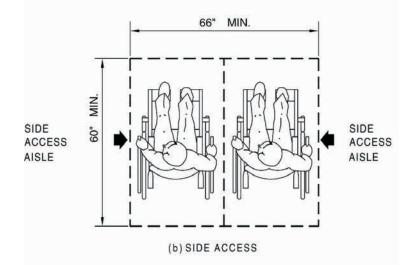
FIGURE 11B-14B—VOLUME CONTROL TELEPHONES



FIGURE 11B-14C—INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS



## (a) FORWARD OR REAR ACCESS



NOTE: EACH INDIVIDUAL SEATING POSITION HAS AN EGRESS ROUTE WHICH DOES NOT CROSS THROUGH OTHER SEATING POSITIONS.

FIGURE 11B-15—SPACE REQUIREMENTS FOR WHEELCHAIR SEATING

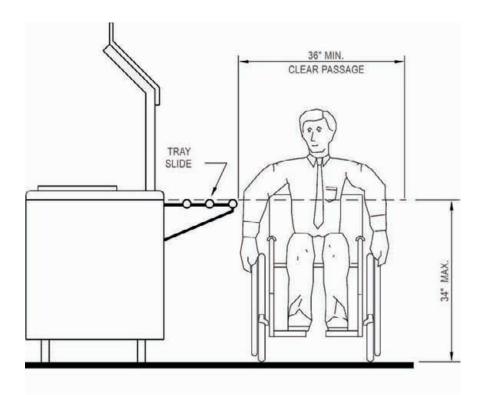


FIGURE 11B-16—FOOD SERVICE LINES

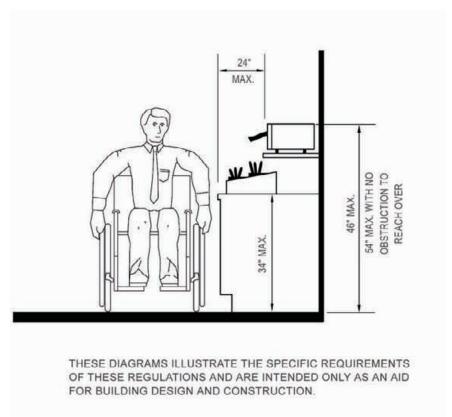
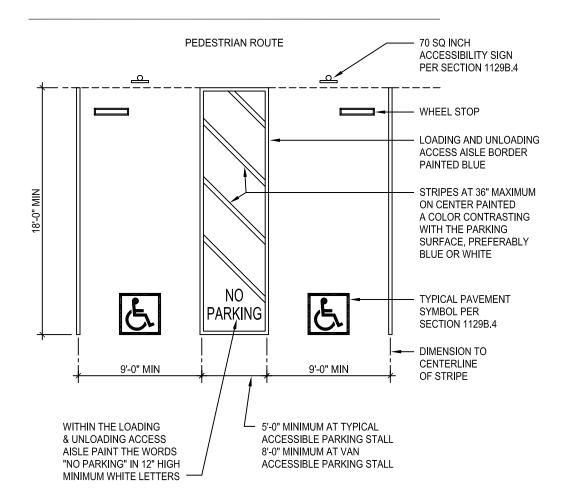


FIGURE 11B-17—TABLEWARE AREAS



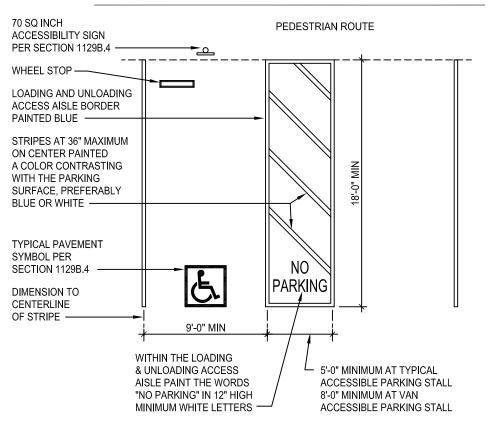
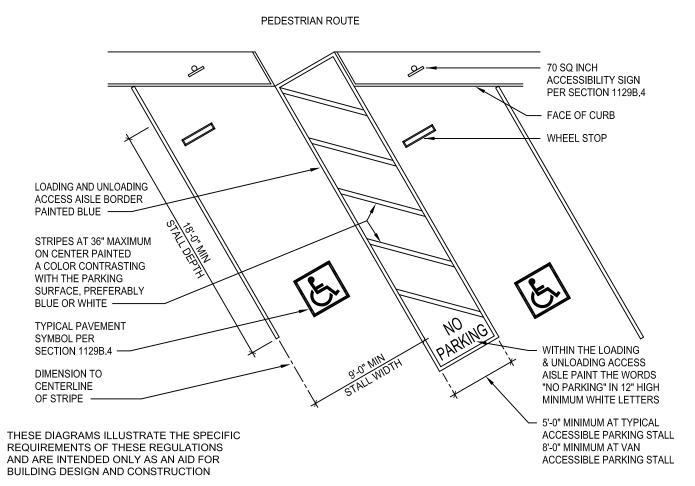
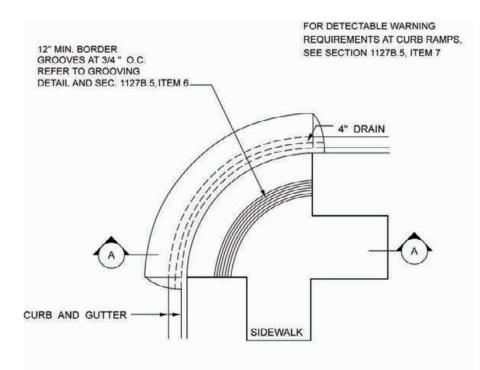
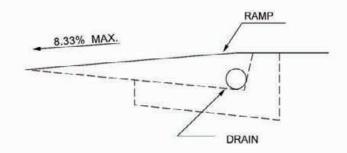


FIGURE 11B-18B - SINGLE PARKING STALLS

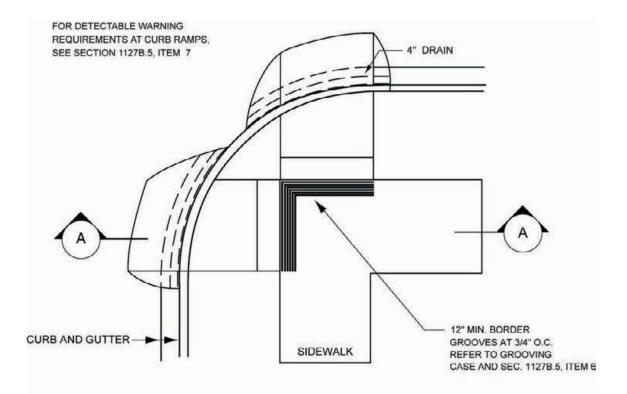






SECTION A-A

FIGURE 11B-19A—CURB DETAILS



SEE FIGURE 11B-19A

FIGURE 11B-19B—CURB DETAIL

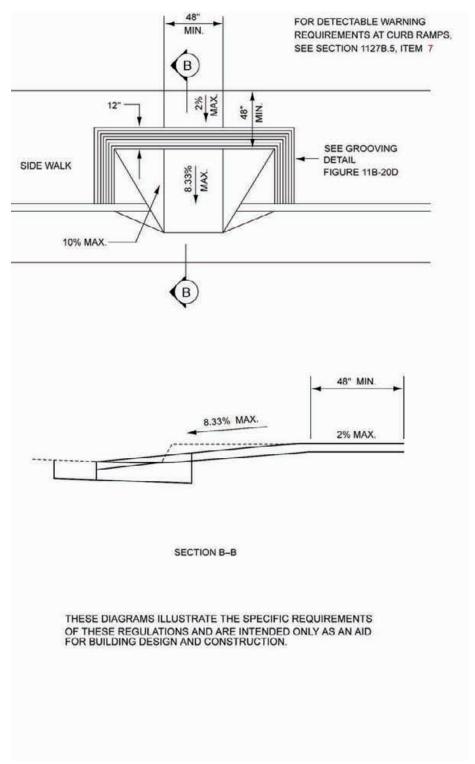


FIGURE 11B-19C—CURB DETAIL

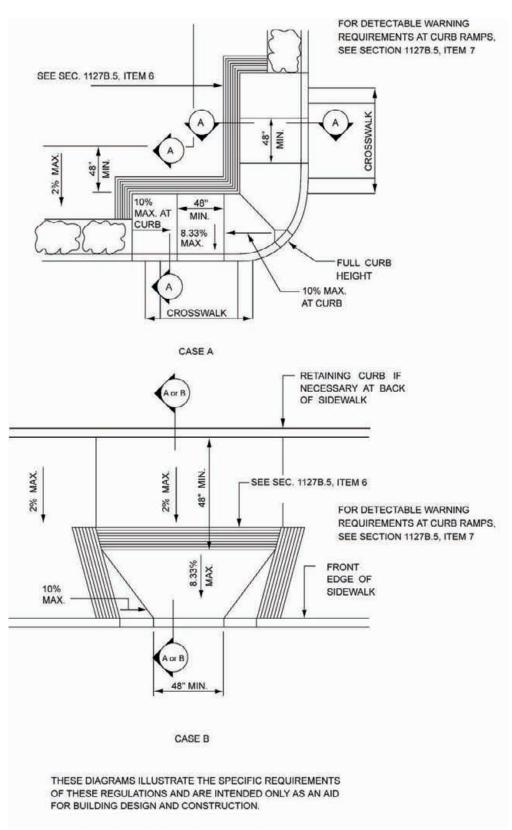
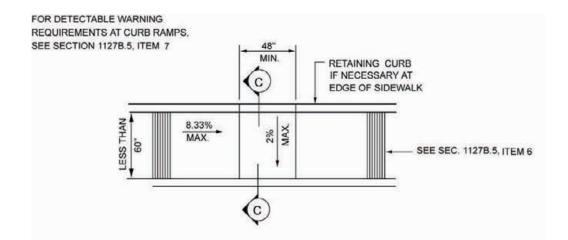


FIGURE 11B-20A—CURB DETAIL—CASES A AND B



CASE C
SIDEWALK LESS THAN 60" WIDE

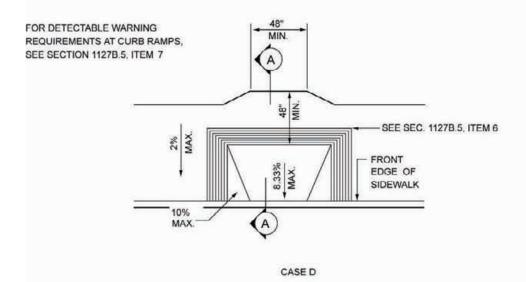


FIGURE 11B-20B—CURB DETAIL—CASES C AND D

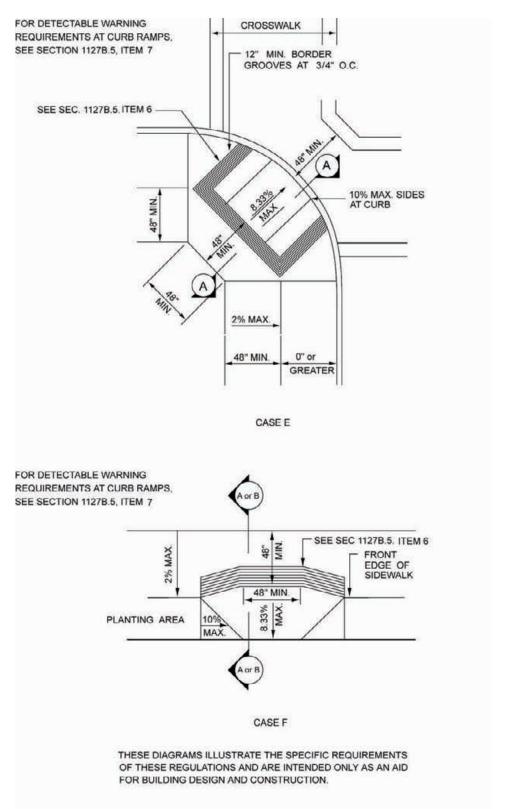


FIGURE 11B-20C—CURB DETAIL—CASES E AND F

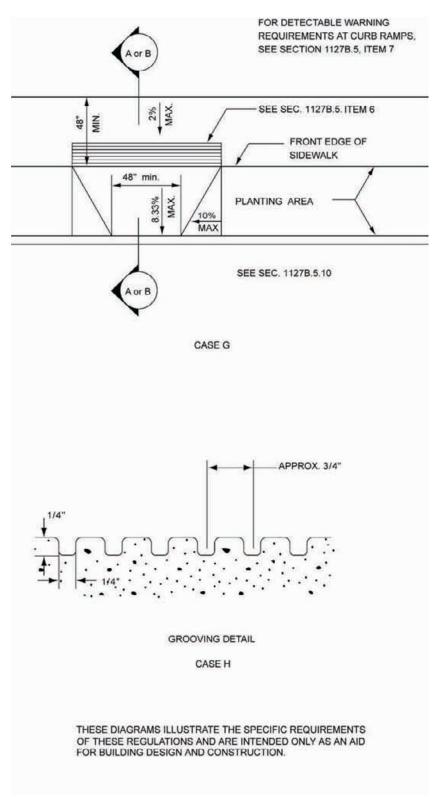


FIGURE 11B-20D—CURB DETAIL—CASES G AND H

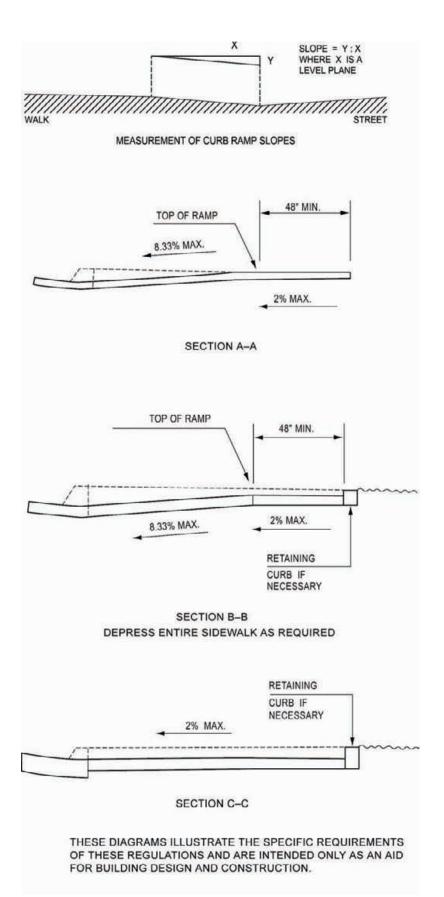


FIGURE 11B-20E—CURB SECTIONS

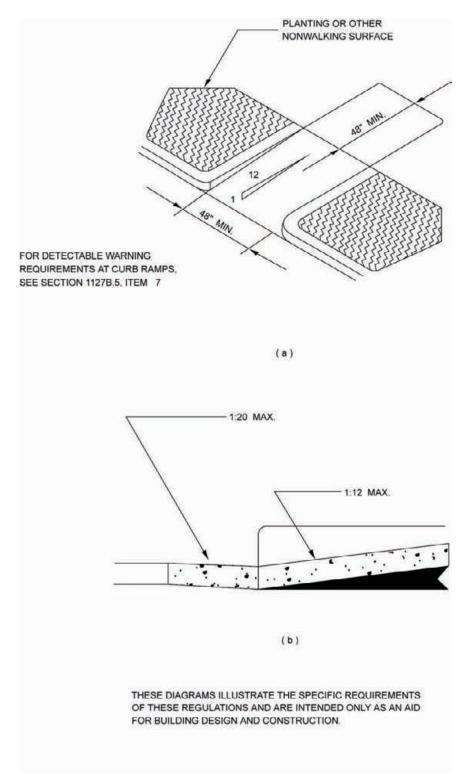


FIGURE 11B-21—RETURNED CURB STYLE

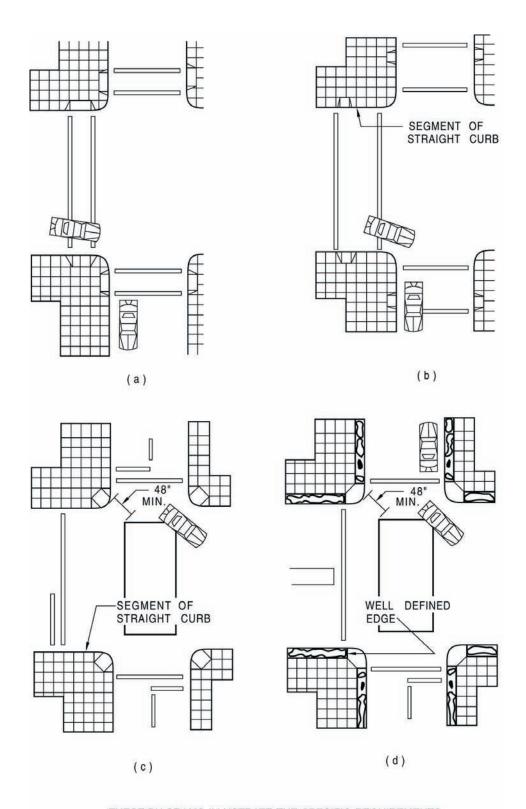
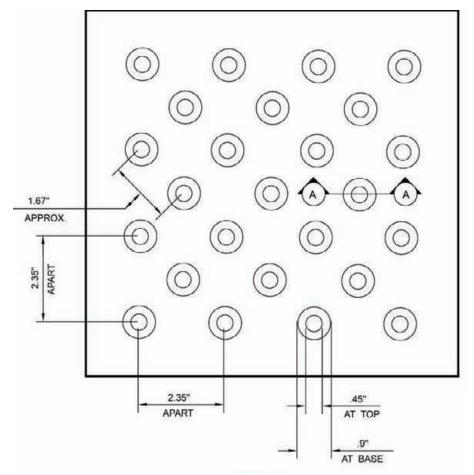
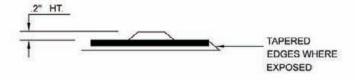


FIGURE 11B-22—CURB RAMPS AT MARKED CROSSING

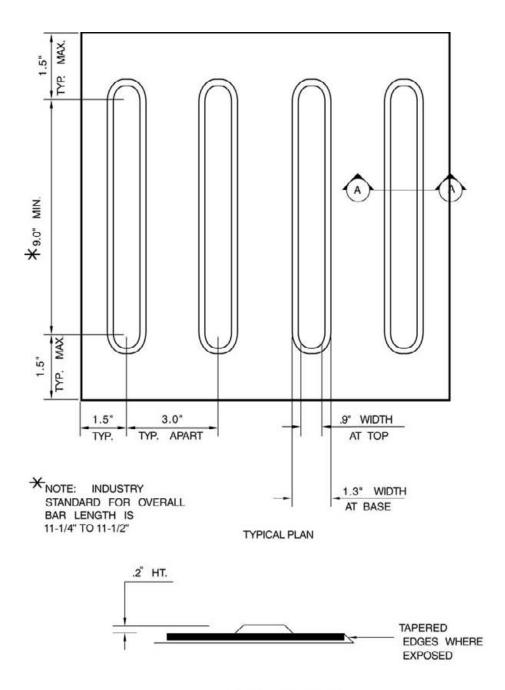


TYPICAL PLAN



TYPICAL SECTION A-A

FIGURE 11B-23A—TRUNCATED DOMES



TYPICAL SECTION A-A

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-23B—DIRECTIONAL BARS

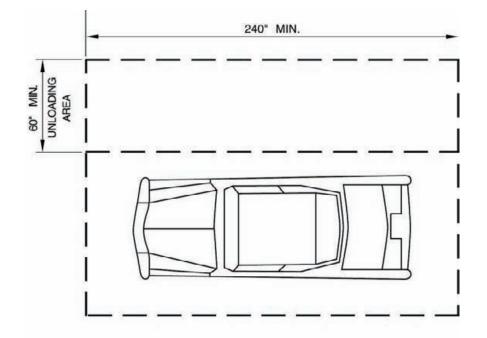


FIGURE 11B-24—ACCESS AISLE AT PASSENGER LOADING ZONES

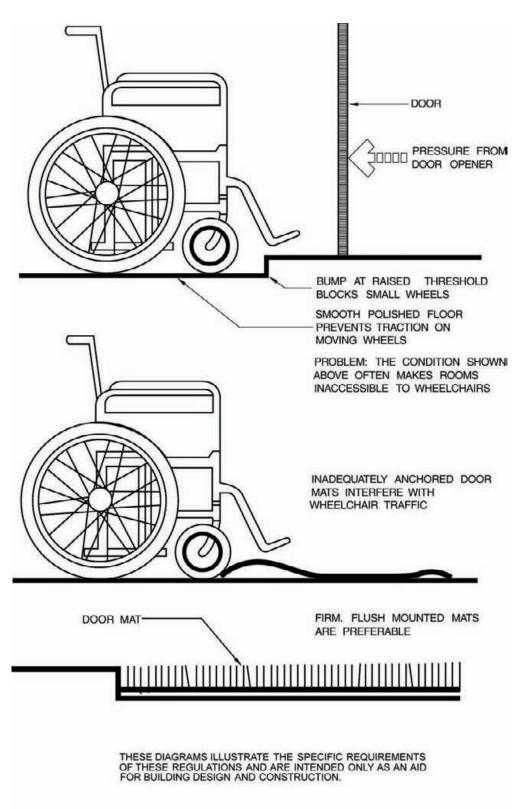
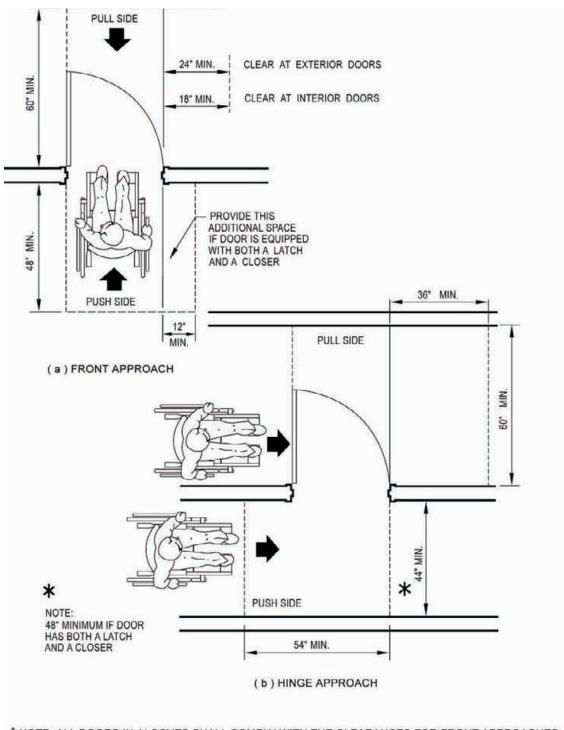
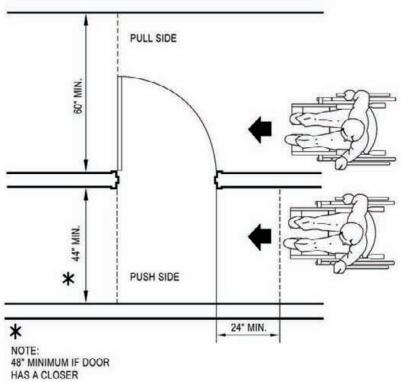


FIGURE 11B-25—OBSTRUCTIONS



\* NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES.

FIGURE 11B-26A—LEVEL MANEUVERING CLEARANCE AT DOORS



(c) LATCH APPROACH

\* NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES.

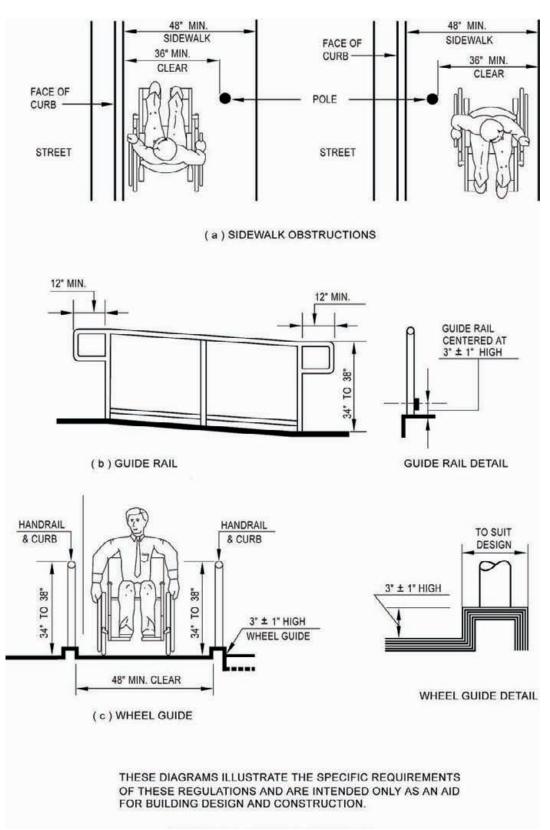
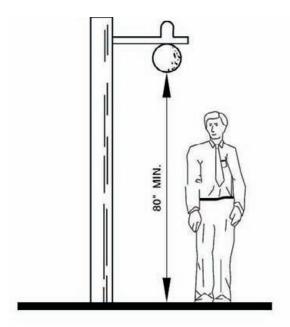
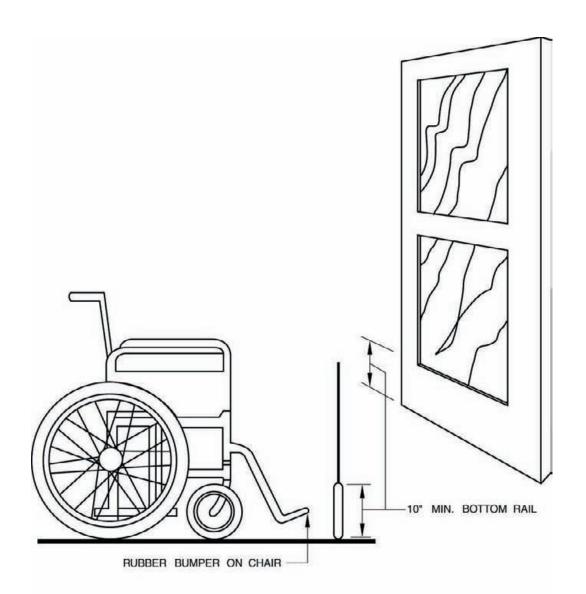


FIGURE 11B-27—RAMPS AND SIDEWALKS



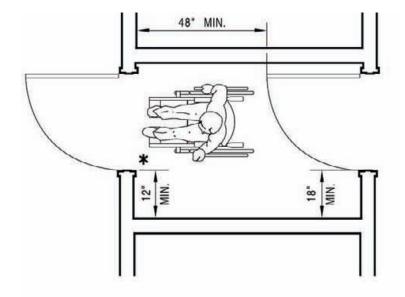
THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-28—OVERHANGING OBSTRUCTION

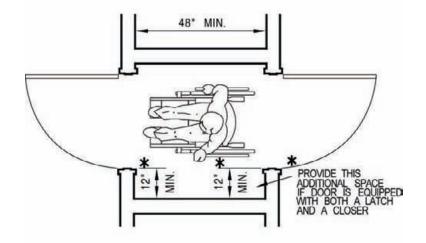


THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-29—DOOR CONSTRUCTION



#### (a) DOOR IN SERIES

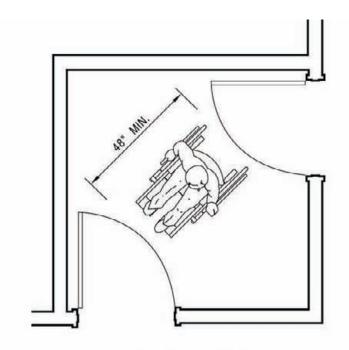


#### (b) BOTH DOORS OPEN OUT

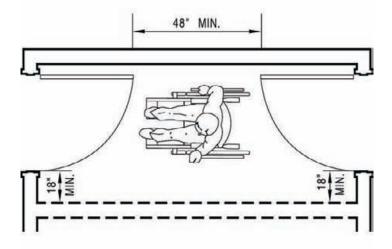
(SERVING OTHER THAN A REQUIRED EXIT STAIRWAY)

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-30—VESTIBULE



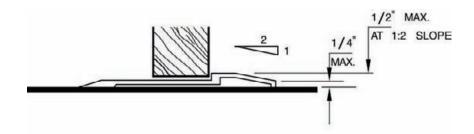
(a) DOORS AT ADJACENT WALLS



(b) DOORS AT OPPOSITE WALLS

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-31—VESTIBULE (SERVING OTHER THAN REQUIRED EXIT STAIRWAY)



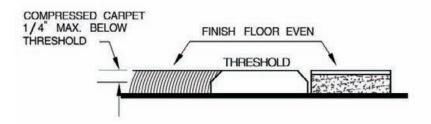
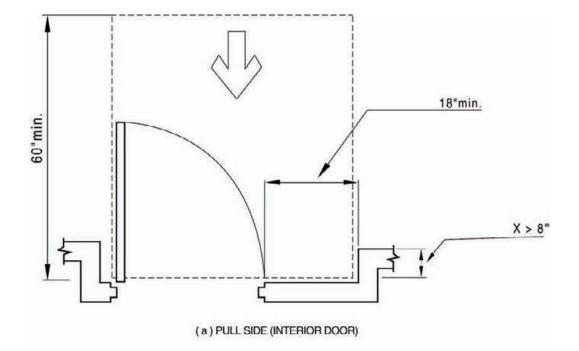
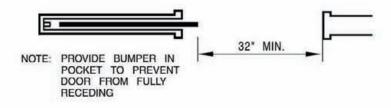
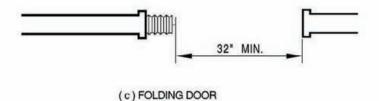


FIGURE 11B-32—THRESHOLDS



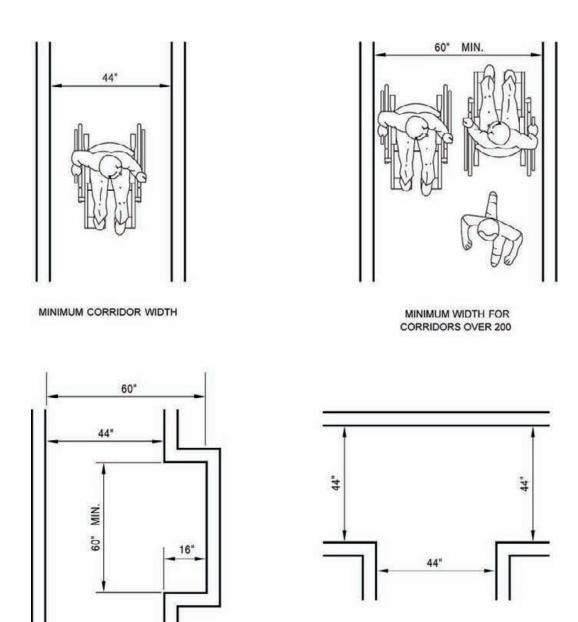


#### (b) SLIDING DOOR



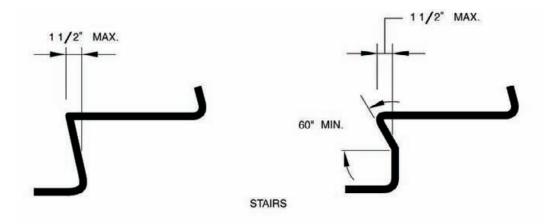
THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-33—CLEAR DOOR WIDTH AND DEPTH



PASSING ALCOVES FOR CORRIDORS OVER 200' IN LIEU OF 60" MIN. WIDTH

FIGURE 11B-34—CORRIDOR OVER 200 FEET (60 960 mm)



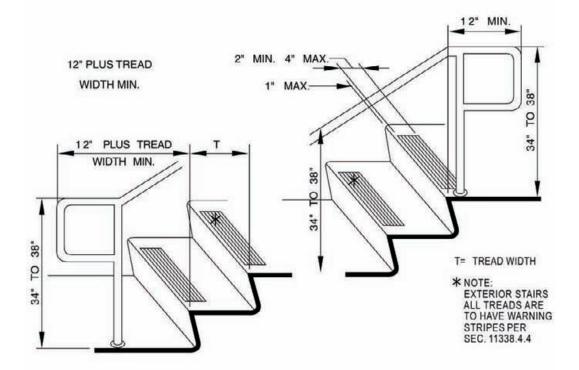


FIGURE 11B-35—WARNING STRIPING AND HANDRAIL EXTENSIONS

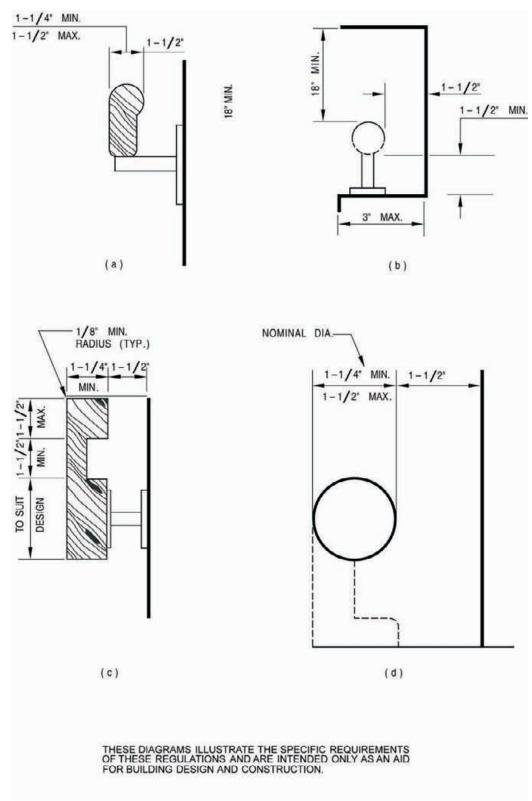


FIGURE 11B-36—STAIR HANDRAILS

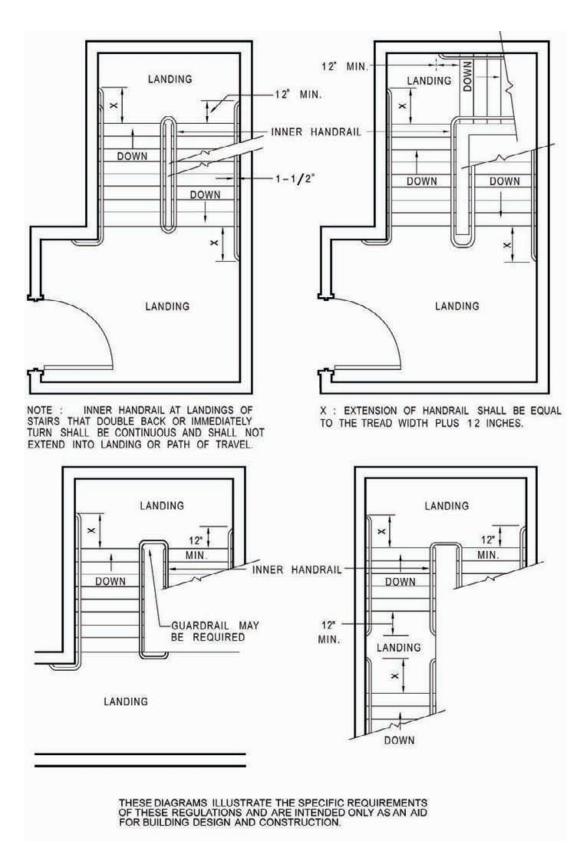
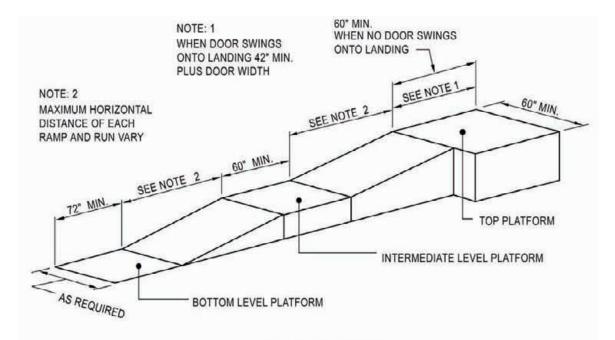
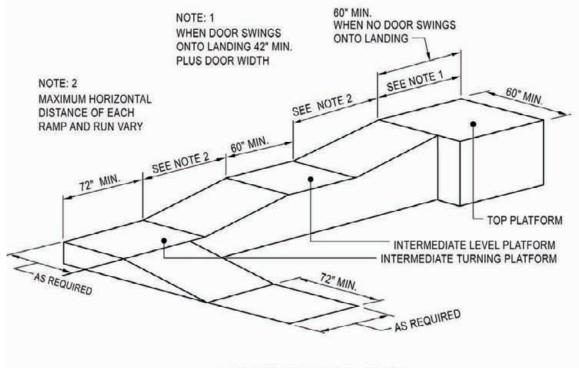


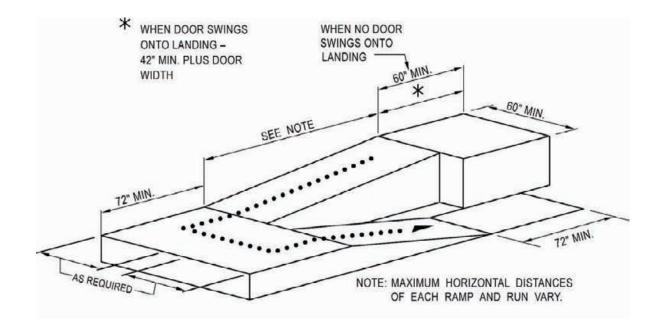
FIGURE 11B-37—STAIR HANDRAILS



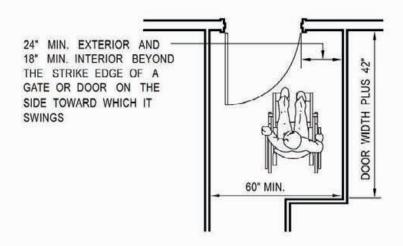
#### (a) STRAIGHT RAMP RUN



#### (b) RAMP WITH TURNING PLATFORM



#### (a) RAMP WITH INTERMEDIATE SWITCH BACK PLATFORM



(b) RAMP LANDING AT DOORWAY



FIGURE 11B-40—CLEANER AIR SYMBOL

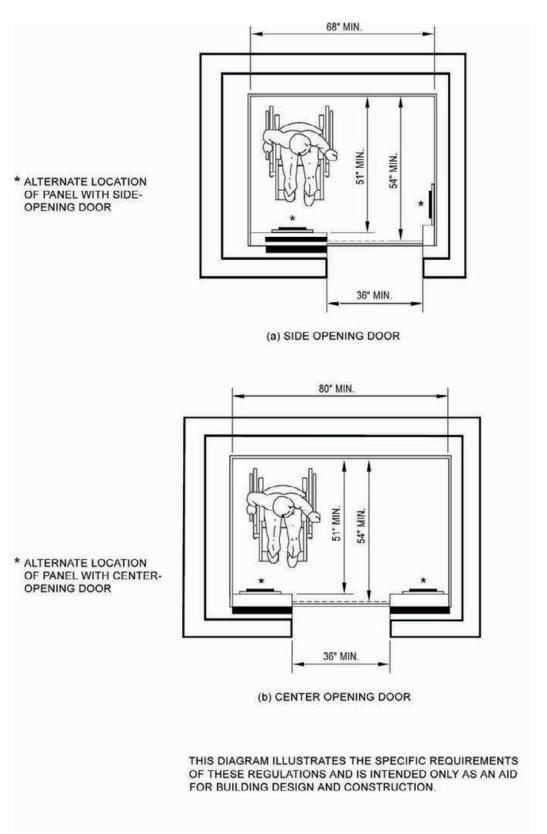
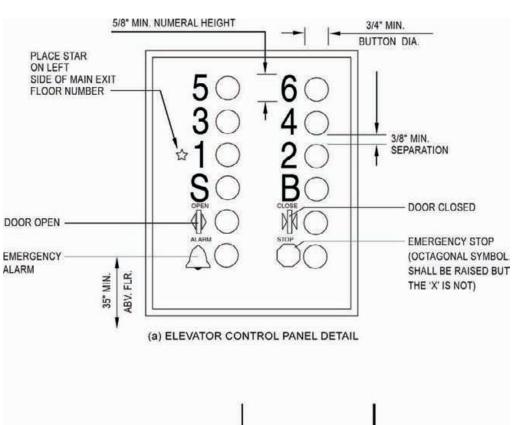
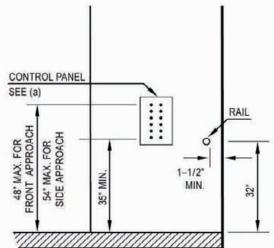


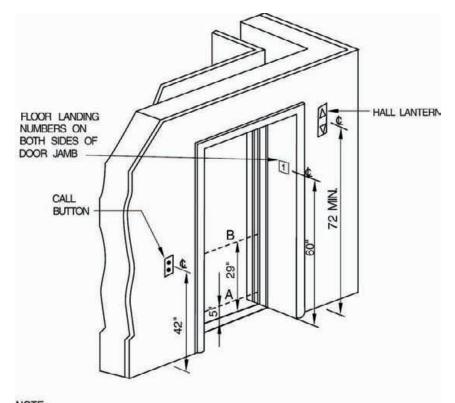
FIGURE 11B-40A—MINIMUM DIMENSIONS OF ELEVATOR CARS





(b) MAXIMUM INSTALLATION HEIGHTS ABOVE CAB FLOOR

FIGURE 11B-40B—ELEVATOR CONTROL PANEL



NOTE:
THE AUTOMATIC DOOR REOPENING DEVICE IS ACTIVATED IF AN OBJECT PASSES
THROUGH EITHER LINE A OR LINE B. LINE A AND LINE B REPRESENT THE VERTICAL
LOCATION OF THE DOOR REOPENING DEVICE NOT REQUIRING CONTACT.

FIGURE 11B-40C—HOISTWAY AND ELEVATOR ENTRANCES

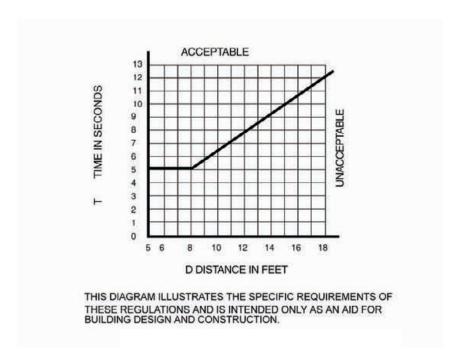


FIGURE 11B-40D—GRAPH OF TIMING EQUATION

#### CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 11C – STANDARDS FOR CARD READERS AT GASOLINE FUEL-DISPENSING FACILITIES

Adopting Agency		B S C	S F M		HC	D	DS	SA		OSHPD			C S A	DHS	G	Ε	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4							
Adopt Entire California Chapter							Х												
Adopt entire California Chapter as amended (amended sections listed below)																			
Adopt only those sections that are I	isted below																		
Chapter / Section	Codes																		

#### SECTION 1101C CARD-READER DEVICES AT FUEL-DISPENSING EQUIPMENT

**1101C.1 General.** Notwithstanding other requirements in the California Building Code (CBC), only the requirements and additional definitions in this section shall apply to card-reading devices in motor vehicle fuel facilities, except that administrative requirements which are found in Chapter 1 still apply.

For purposes of this section, the following additional definitions shall apply:

ACCESSIBLE. See Chapter 11A, Section 1107A.1-A and Chapter 11B, Section 1102B.

ACCESSIBLE ELEMENT. See Chapter 11B, Section 1102B.

**ALTERNATE CARD READER** shall be defined in this section as functionally equal card reader and control directly attached to or an integral part of the fuel dispenser in addition to the primary card reader which is an integral part of the dispenser.

**FREE-STANDING PEDESTAL** is a card-reading device which controls one or more remote fuel dispensers that have no card reader as an integral part of the fuel dispenser.

GRADE (Adjacent Ground Elevation). See Chapter 2, Section 202.

INTERNATIONAL SYMBOL OF ACCESSIBILITY. See Chapter 11A, Section 1107A.9-I and Chapter 11B, Section 1102B.

**LEVEL ACCESSIBLE AREA,** for the purposes of this section, shall mean a slope of not more than 2 percent in front of the dispensing device; however, the slope may extend to 5 percent where the enforcing authority determines that, due to unusual site conditions, the 2 percent gradient is not obtainable.

LEVEL AREA. See Chapter 11A, Section 1107A.12-L and Chapter 11B, Section 1102B.

**PATH OF TRAVEL** shall include the clearance requirements stated in Chapter 11B for Wheelchair Passage Width, and Relationship of Maneuvering Clearances to Wheelchair Spaces, except that pump nozzles and hoses may overlap required clearances.

RECOMMEND. See Chapter 2, Section 202.

TYPE OF MOTOR FUEL shall mean gasoline, diesel, compressed natural gas, methanol, electricity or ethanol.

### SECTION 1102C APPLICATION

This section shall apply to equipment located at the following facilities:

- 1. New motor vehicle fuel facilities.
- 2. Existing motor vehicle fuel facilities built before the effective date of this section when:
  - 2.1 Remodeling or reconstruction includes removal and replacement of one or more islands and associated piping and tank(s); or
  - 2.2 Remodeling includes reconstruction or removal and replacement of fuel islands at facilities that provide free-standing pedestal card readers.

#### SECTION 1103C NUMBER OF ACCESSIBLE CARD-READING DEVICES REQUIRED

Where only one card-reading device is installed for use with any type of motor fuel, it shall meet the required features of this section. When more than one card-reading location is available for a specific type of motor fuel, a minimum of two for that type shall have the accessible features of this section.

#### SECTION 1104C REQUIRED FEATURES

Card-reading devices at motor vehicle fuel facilities shall be accessible by complying with only the following:

1. The highest operable part of each primary or alternate card reader shall be no more than 54 inches (1372 mm) measured from the base of the fuel dispenser. Where card readers are located on free-standing pedestals, the card-reading control function shall be no more than 54 inches (1372 mm) above an accessible level area which is served by an accessible path of travel.

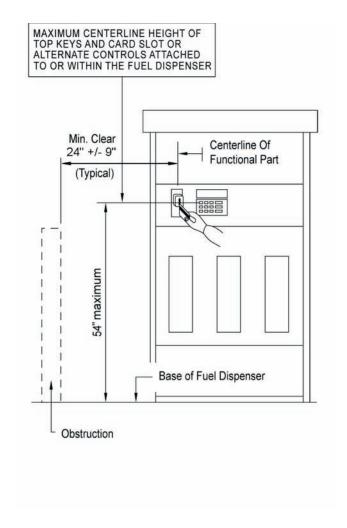
**Exception:** If an enforcing agency requires that fuel dispensers or card-reading devices be placed in a manner where the card-reading device exceeds the requirements described herein, the provisions of Section 1104C do not apply. Any enforcing agency having jurisdiction over retail fueling facilities may not require islands or impose other regulations which conflict with this section, unless the agency documents and justifies the specific necessity for such a rule or ordinance and complies with the requirements of Health and Safety Code Section 18941.

- An accessible path of travel shall be provided to the base of all fuel dispensers required to meet the provisions of this section. Such fuel dispensers shall be mounted on the accessible level area.
- 3. An accessible level area shall be provided which is minimally 30 inches by 48 inches (762 mm by 1219 mm) level and clear. This area shall be provided within 10 inches (254 mm) in plan view of the face of the controls and shall be unobstructed by any features, except pump nozzles and hoses, with the long side of this space parallel to and centered [plus or minus 9 inches (229 mm)] with the face of the card-reader controls. See Figures 11C-1 and 11C-2.

### SECTION 1105C PROTECTION OF DISPENSERS MOUNTED AT GRADE

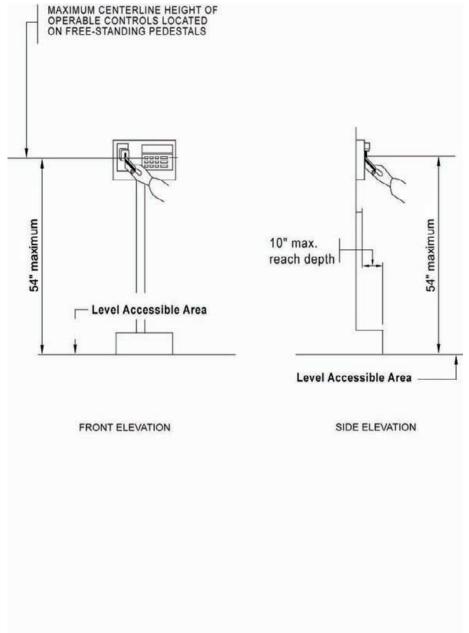
Dispensers mounted at grade shall be protected from vehicular damage as required by Part 9, Title 24 (California Fire Code).

### **FIGURES 11C-1 AND 11C-2**



For SI: 1 inch = 25.4 mm.

FIGURE 11C-1 CARD READERS MOUNTED IN FUEL DISPENSERS



For SI: 1 inch = 25.4 mm.

FIGURE 11C-2
CARD READERS LOCATED ON FREE-STANDING PEDESTALS

## CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 16 – STRUCTURAL DESIGN

Adopting Agency		B S C	S F M		Н	CD	DS	SA		OSHPD	)		C S A	DHS	G	W	Ε	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire California Chapter																				
Adopt entire California Chapter as amended (amended sections listed below)																				
Adopt only those sections that are I	isted below						Х													
Chapter / Section	Codes																			
1607.7.2	CA						Х													

#### LIVE LOADS SECTION 1607

1607.7 Loads on handrails, guards, grab bars, shower seats dressing room bench seats and vehicle barriers.

**1607.7.2 Grab bars, shower seats and dressing room bench seats.** Grab bars, shower seats and dressing room bench seat systems shall be designed to resist a single concentrated load of 250 pounds (1.11 kN) applied in any direction at any point. [DSA-AC] See Chapter 11A, Section 1127A.4, and Chapter 11B, Sections 1115B.7.2 and 1117B.8, for grab bars, shower seats and dressing room bench seats, as applicable.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 16A – STRUCTURAL DESIGN

Adopting Agency		B S C	S F M		НС	CD	DS	SA		OSHPD	)		C S A	D H S	_	D W R	CEC	C A	S L	S L C
A 1 . 1 . 1 . 0 . 11				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire California Chapter																				
Adopt entire California Chapter as a (amended sections listed below)	mended																			
Adopt only those sections that are li	sted below						Х													
Chapter / Section	Codes																			
1607A.2							Χ													

#### SECTION 1607A LIVE LOADS

**1607***A***.2 Loads not specified.** For occupancies or uses not designated in Table 1607*A*.1, the live load shall be determined in accordance with a method approved by the building official.

#### CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 24 – GLASS AND GLAZING

Adopting Agency		B S C	S F M		Н	CD	DS	SA		OSHPD	)		C S A	DHS	G	W	CEC	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire California Chapter																				
Adopt entire California Chapter as amended amended sections listed below)																				
Adopt only those sections that are	listed below						Х													
Chapter / Section	Codes																			
2406	IBC						Х													

#### SECTION 2406 SAFETY GLAZING

**2406.1 Human impact loads.** Individual glazed areas, including glass mirrors, in hazardous locations as defined in Section 2406.3 shall comply with Sections 2406.1.1 through 2406.1.5.

**2406.1.1 CPSC 16 CFR 1201.** Except as provided in Sections 2406.1.2 through 2406.1.4, all glazing shall pass the test requirements of CPSC 16 CFR 1201, listed in Chapter 35. Glazing shall comply with the CPSC 16 CFR, Part 1201 criteria, for Category I or II as indicated in Table 2406.1.

- 2406.1.2 Plastic glazing. Plastic glazing shall meet the weathering requirements of ANSI Z97.1.
- 2406.1.3 Glass block. Glass-block walls shall comply with Section 2101.2.5.
- **2406.1.4 Louvered windows and jalousies.** Louvered windows and jalousies shall comply with Section 2403.5.

**2406.2 Identification of safety glazing.** Except as indicated in Section 2406.2.1, each pane of safety glazing installed in hazardous locations shall be identified by a manufacturer's designation specifying who applied the designation, the manufacturer or installer and the safety glazing standard with which it complies, as well as the information specified in Section 2403.1. The designation shall be acid etched, sand blasted, ceramic fired, laser etched, embossed or of a type that once applied, cannot be removed without being destroyed.

A label as defined in Section 1702.1 and meeting the requirements of this section shall be permitted in lieu of the manufacturer's designation.

#### Exceptions:

- 1. For other than tempered glass, manufacturer's designations are not required, provided the building official approves the use of a certificate, affidavit or other evidence confirming compliance with this code.
- 2. Tempered spandrel glass is permitted to be identified by the manufacturer with a removable paper designation

**2406.2.1 Multilight assemblies.** Multilight glazed assemblies having individual lights not exceeding 1 square foot (0.09 m2) in exposed areas shall have at least one light in the assembly marked as indicated in Section 2406.2. Other lights in the assembly shall be marked "CPSC 16 CFR 1201."

### TABLE 2406.1 MINIMUM CATEGORY CLASSIFICATION OF GLAZING

EXPOSED SURFACE AREA OF ONE SIDE OF ONE LITE	GLAZING IN STORM OR COMBINATION DOORS (Category class)	GLAZING IN DOORS (Category class)	GLAZED PANELS REGULATED BY ITEM 7 OF SECTION 2406.3 (Category class)	GLAZED PANELS REGULATED BY ITEM 6 OF SECTION 2406.3 (Category class)	ENCLOSURES REGULATED BY ITEM 5 OF SECTION 2406.3 (Category class)	SLIDING GLASS DOORS PATIO TYPE (Category class)
9 square feet or less	ı	П	No requirement	ı	П	II
More than 9 square feet	II	II	II	II	II	II

For SI: 1 square foot = 0.0929 m2.

**2406.3 Hazardous locations.** The following shall be considered specific hazardous locations requiring safety glazing materials:

- 1. Glazing in swinging doors except jalousies (see Section 2406.3.1).
- 2. Glazing in fixed and sliding panels of sliding door assemblies and panels in sliding and bifold closet door assemblies.
- Glazing in storm doors.
- Glazing in unframed swinging doors.
- 5. Glazing in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above a standing surface.
- 6. Glazing in an individual fixed or operable panel adjacent to a door where the nearest exposed edge of the glazing is within a 24-inch (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the walking surface.

#### **Exceptions:**

- 1. Panels where there is an intervening wall or other permanent barrier between the door and glazing.
- 2. Where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth. Glazing in this application shall comply with Section 2406.3, Item 7.
- Glazing in walls perpendicular to the plane of the door in a closed position, other than the wall towards
  which the door swings when opened, in one- and two-family dwellings or within dwelling units in Group R-
- 7. Glazing in an individual fixed or operable panel, other than in those locations described in preceding Items 5 and 6, which meets all of the following conditions:
  - 7.1. Exposed area of an individual pane greater than 9 square feet (0.84 m2);
  - 7.2. Exposed bottom edge less than 18 inches (457 mm) above the floor;
  - 7.3. Exposed top edge greater than 36 inches (914 mm) above the floor; and
  - 7.4. One or more walking surface(s) within 36 inches (914 mm) horizontally of the plane of the glazing.

**Exception:** Safety glazing for Item 7 is not required for the following installations:

 A protective bar 11/2 inches (38 mm) or more in height, capable of withstanding a horizontal load of 50 pounds plf (730 N/m) without contacting the glass, is installed on the accessible sides of the glazing 34 inches to 38 inches (864 mm to 965 mm) above the floor.

- The outboard pane in insulating glass units or multiple glazing where the bottom exposed edge
  of the glass is 25 feet (7620 mm) or more above any grade, roof, walking surface or other
  horizontal or sloped (within 45 degrees of horizontal)(0.78 rad) surface adjacent to the glass
  exterior.
- 8. Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface.
- 9. Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where all of the following conditions are present:
  - 9.1. The bottom edge of the glazing on the pool or spa side is less than 60 inches (1524 mm) above a walking surface on the pool or spa side of the glazing; and
  - 9.2. The glazing is within 60 inches (1524 mm) horizontally of the water's edge of a swimming pool or spa.
- Glazing adjacent to stairways, landings and ramps within 36 inches (914 mm) horizontally of a
  walking surface; when the exposed surface of the glass is less than 60 inches (1524 mm) above the
  plane of the adjacent walking surface.
- 11. Glazing adjacent to stairways within 60 inches (1524 mm) horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glass is less than 60 inches (1524 mm) above the nose of the tread.

Exception: Safety glazing for Item 10 or 11 is not required for the following installations where:

- 1. The side of a stairway, landing or ramp which has a guardrail or handrail, including balusters or in-fill panels, complying with the provisions of Sections 1013 and 1607.7; and
- 2. The plane of the glass is greater than 18 inches (457 mm) from the railing.

**2406.3.1 Exceptions.** The following products, materials and uses shall not be considered specific hazardous locations:

- 1. Openings in doors through which a 3-inch (76 mm) sphere is unable to pass.
- 2. Decorative glass in Section 2406.3, Item 1, 6 or 7.
- 3. Glazing materials used as curved glazed panels in revolving doors.
- 4. Commercial refrigerated cabinet glazed doors.
- Glass-block panels complying with Section 2101.2.5.
- 6. Louvered windows and jalousies complying with the requirements of Section 2403.5.
- 7. Mirrors and other glass panels mounted or hung on a surface that provides a continuous backing support.

**2406.4 Fire department access panels.** Fire department glass access panels shall be of tempered glass. For insulating glass units, all panes shall be tempered glass.

#### CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 27 – ELECTRICAL

Adopting Agency		B S C	S F M		НС	CD	D	SA		OSHPD			C S A	D H S	A G R	D W R	E	Α	S L	S L C
Adopt Entire Colifornia Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire California Chapter																				
Adopt entire California Chapter as a (amended sections listed below)	amended																			
Adopt only those sections that are I	isted below						Х													
Chapter / Section	Codes																			
2702.2.5	IBC						Х													
2702.2.6	IBC						Χ													

#### SECTION 2702 [F] EMERGENCY AND STANDBY POWER SYSTEMS

#### [F] 2702.2 Where required.

**[F] 2702.2.5 Accessible means of egress elevators.** Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.

**[F] 2702.2.6 Accessible means of egress platform lifts.** Standby power in accordance with this section or ASME A18.1 shall be provided for platform lifts that are part of an accessible means of egress in accordance with Section 1007.5.

## CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 30 – ELEVATORS AND CONVEYING SYSTEMS

Adopting Agency	Adopting Agency		S F M		НС	CD	DS	SA		OSHPD	)		C S A	DHS	D W R	E	C A	S L	S L C
Adopt Entire California Chapter				1	2	1/AC	AC	SS	1	2	3	4							-
·											<u> </u>								
Adopt entire California Chapter as amended (amended sections listed below)																			
Adopt only those sections that are	listed below						Х												
Chapter / Section	Codes																		
3001.1 w/Exc	CA						Х												
3001.3	CA						Х												

#### SECTION 3001 GENERAL

**3001.1 Scope.** This chapter governs the design, construction, installation, alteration and repair of elevators and conveying systems and their components.

Exception: [DSA-AC] For accessibility requirements for special access lifts and elevators, see California Code of Regulations, Title 8 and Title 24, Part 2, Sections 1124A and 1116B.

**3001.3 Accessibility.** Passenger elevators and special access lifts required to be accessible by Chapters 11A or 11B shall conform to Chapter 11A for applications listed in Section 108.2.1.2 regulated by the Department of Housing and Community Development or Chapter 11B for applications listed in Section 109.1 regulated by the Division of the State Architect—Access Compliance.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 31 – SPECIAL CONSTRUCTION

Adopting Agency		B S C	S F M		Н	CD	DS	SA		OSHPD	)		C S A	DHS	G	D W R	E	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire California Chapter																				
Adopt entire California Chapter as amended (amended sections listed below)																				
Adopt only those sections that are I	isted below						Х													
Chapter / Section	Codes																			
3104.2, Exc 2 only	CA						X													

### SECTION 3104 PEDESTRIAN WALKWAYS AND TUNNELS

**3104.2 Separate structures.** Connected buildings shall be considered to be separate structures.

#### **Exceptions:**

1

2. **[DSA-AC]** For purposes of accessibility as required by Chapter 11A, structurally connected buildings, buildings connected by stairs, walkways, or roofs, and buildings with multiple wings shall be considered one structure.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 31B – PUBLIC SWIMMING POOLS

Adopting Agency		B S C	S F M		НС	CD	DS	SA		OSHPD	)		C S A	D H S	A G R	 Ε	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4							
Adopt Entire California Chapter							Х												
Adopt entire California Chapter as amended (amended sections listed below)																			
Adopt only those sections that are I	sted below																		
Chapter / Section	Codes																		
3113B.1 w/Exc 4 only							Х												

#### **Division I--GENERAL**

#### SECTION 3113B POOL DECKS

**3113B.1 General.** A minimum continuous and unobstructed 4-foot wide (1219 mm) slip-resistant, nonabrasive deck area of concrete or like material shall be provided flush with the top of the pool shell wall extending completely around the pool and the deck area shall further extend 4 feet (1219 mm) on both sides and rear of any diving board or slide and their appurtenances. The deck width shall be measured from the poolside edge of the coping lip.

#### Exceptions:

- 1. A deck at least 4 feet (1219 mm) in width shall extend around 50 percent or more of the perimeter of a spa pool. For spa pools that have their walls extending above the ground or floor level, the deck area requirement shall apply at the ground or floor level unless otherwise specified by the enforcing agency.
- 2. The deck width separating a spa pool from an adjacent pool shall not be less than 6 feet (1829 mm) wide.
- 3. The deck may be omitted from around a temporary training pool.
- 4. [DASH-AC] Any mechanism provided to assist persons with disabilities in gaining entry into the pool and in exiting from the pool shall comply with Chapter 11B, Section 1104B.4.3 Participation Areas.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 33 – SAFEGUARDS DURING CONSTRUCTION

Adopting Agency		B S C	S F M		НС	CD	DS	SA		OSHPD			C S A	D H S	W	Е	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4							
Adopt Entire California Chapter																			
dopt entire California Chapter as amended amended sections listed below)																			
Adopt only those sections that are I	isted below						Х												
Chapter / Section	Codes																		
3306.2	<del>IBC</del> <u>CA</u> <sup>6</sup>						Х												

# SECTION 3306 PROTECTION OF PEDESTRIANS

**3306.2 Walkways.** A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the authority having jurisdiction authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4 feet (1219 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with *Chapters 11A or 11B* and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m²).

<sup>&</sup>lt;sup>6</sup> Pending CBC Errata for the 2007 Triennial Edition of Title 24, 2007 California Building Code.
Corrections are made in the Matrix Adoption Table, as shown in strikeout (etrikeout) and underline (underline).

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 34 – EXISTING STRUCTURES

Adopting Agency		B S C	S F M		HC	CD	D:	SA		OSHPD			C S A	D H S	A G R	D W R	Ε	C A	S L	S L C
Adopt Entire California Chapter				1	2	1/AC	AC	SS	1	2	3	4								
<u> </u>																				
dopt entire California Chapter as amended mended sections listed below)																				
Adopt only those sections that are	nended sections listed below) opt only those sections that are listed below						Х													
Chapter / Section	Codes																			
3401.1 (last paragraph only)	CA						Х													
3407 (1 <sup>st</sup> paragraph)	CA						Х													

#### SECTION 3401 GENERAL

**3401.1 Scope.** The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing structures, *including state-regulated structures in accordance with Section 3401.1 and 3401.1.2.* 

#### **Exceptions:**

1. Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300-02.

2.

[DSA-AC] For applications listed in Section 109.1 regulated by the Division of the State Architect—Access Compliance for accessibility requirements, see Chapter 11B, Section 1134B.

#### SECTION 3407 HISTORIC BUILDINGS

[DSA-AC] For applications listed in Section 109.1 regulated by the Division of the State Architect—Access Compliance for Qualified Historical Buildings, see California Code of Regulations, Title 24, Part 8 (California Historical Building Code).

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE <sup>7</sup>CHAPTER 35 – REFERENCED STANDARDS

Adopting Agency		B S C	S F M		НС	CD	DS	SA	OS	SHPD	)		C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire California Chapter				1	2	1/AC	AC	SS	1	2	3	4						$\dashv$	4	
Adopt entire California Chapter as a (amended sections listed below)																				
Adopt only those sections that are I	isted below						Х													
Chapter / Section	Codes																			
<del>ACI</del>							X											-	$\dashv$	
AISC							X													
ANSI S3.41- <del>96</del> <u>90 (R2001)</u>	CA						Х													
ANSI Z97.1-84 (R1994)	IBC						Х													
ASCE/SEI							X													
ASME A17.1-04	IBC						Х													
ASME A18.1-03	IBC						X													
AWS							X													
BHMA A156.10-99	IBC						X													
BHMA A156.19-02	IBC						X													
CPSC 16 CFR Part 1201 (1977)	IBC						X													
<del>ICC</del>							X													
NFPA 72-02	CA						Х													
<del>PCI</del>							X													

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in sections 101.5 and 101.7 and in *Appendix Chapter 1*, Section 102.4.

ANSI	American National Standards Institute 25 West 43 <sup>rd</sup> Street, Fourth Floor New York, NY 10036
Standard	Title
reference	Referenced
number	in code
	section number
1	
S3.41-90 (R2001)	American National Standard Audible Evacuation Signal
	Safety Glazing Materials Used in Buildings – Safety Performance Specifications
Z97.1-84 (R1994)	and Methods of Test (Reaffirmed 1994)

ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990
Standard	Title
reference	Referenced
number	in code
	section
	number
A17.1-04	Safety Code for Elevators and Escalators with A17.1a-2004
	addenda and A17.1S Supplement
	1607.8.1, 3001.2, 3001.4, 3002.5, 3003.2, 3409.8.2
A18.1-03	Safety Standard for Platform Lifts and Stairway Chairlifts

<sup>&</sup>lt;sup>7</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, 2007 California Building Code – Corrections are made in the Matrix Adoption Table, as shown in strikeout (strikeout) and underline (underline).

ВНМА	Builders Hardware Manufacturers' Association 355 Lexington Avenue, 17 <sup>th</sup> Floor New York, NY 10017-6603
Standard	Referenced
reference	in code
number	Title section number
A 156.10-99	American National Standard for Power Operated Pedestrian Doors
A 156.19-02	Standard for Power Assist and Low Energy Operated Doors

CPSC	Consumer Product Safety Commission 4330 East West Highway Bethesda, MD 20814-4408
Standard	Title Referenced
reference	in code
number	section
	number
16 CFR Part 1201 (1977)	Safety Standard for Architectural Glazing Material 2406.1.1, 2406.2.1, 2407.1, 2408.2.1, 2408.3

NFPA	National Fire Protection Association  1 Battery march Park Quincy, MA 02269-9101
Standard reference number	Title Referenced in code section
72-02	National Fire Alarm Code, as amended*
	<b>7.4.1.2</b> The total sound pressure level produced by combining the ambient sound pressure level with all audible notification appliances operating shall not exceed 110 dBA anywhere in the occupiable area.
	7.4.3.1 Audible notification appliances intended for operation in the private mode shall have a sound level of not less than 45 dBA at (3 m) 10 feet or more than 110 dBA at the minimum hearing distance from the audible appliance.

# CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE APPENDIX CHAPTER 1 – ADMINISTRATION

Adopting Agency		B S C	S F M		Н	CD	DS	SA		OSHPD	)		C S A	D H S		C E C	C A	S L	S L C
				1	2	1/AC	AC	SS	1	2	3	4							
Adopt Entire California Chapter	· · · · · · · · · · · · · · · · · · ·																		
Adopt entire California Chapter as amended (amended sections listed below)																			
Adopt only those sections that are	isted below						Х												
Chapter / Section Codes																			
110.2	IBC						Х												
													_						

# SECTION 110 CERTIFICATE OF OCCUPANCY

**110.2. Certificate issued.** After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

- 1. The building permit number.
- 2. The address of the structure.
- 3. The name and address of the owner.
- 4. A description of that portion of the structure for which the certificate is issued.
- 5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- 6. The name of the building official.
- 7. The edition of the code under which the permit was issued.
- 8. The use and occupancy, in accordance with the provisions of Chapter 3.
- 9. The type of construction as defined in Chapter 6.
- 10. The design occupant load.
- 11. If an automatic sprinkler system is provided, whether the sprinkler system is required.
- 12. Any special stipulations and conditions of the building permit.

#### HISTORY NOTE APPENDIX

# California Building Code California Code of Regulations, Title 24, Part 2

For prior history, see the History Note Appendix to the *California Building Code*, 2001 Triennial Edition effective November 1, 2002.

- (BSC 01/06, BSC 06/06, DSA-AC 01/06, DSA-AC 02/06, DSA-SS 01/06, DSA-SS 02/06, HCD 04/06, OSHPD 02/06, OSHPD 03/06, OSHPD 04/06, SFM 05/06) Adoption by reference of the 2006 International Building Code with necessary state amendments and repeal of the 1997 edition of the Uniform Building Code. Filed with the Secretary of State of February 15, 2007 and effective on January 1, 2008.
- 2. Erratum to correct editorial errors in Chapter 1, Section 108.2.1.3. Chapter 1, Section 109.1.2.1. Chapter 2, Definitions Matrix Adoption Table correction. Chapter 4, Section 430 Article reference change. Chapter 5, Table 503. Chapter 5, Section 507.3, Chapter 11A, Section 1110A.2. Chapter 11A, Figure 11A-9D and 11A-9E out of order. Chapter 11A, Section 1121B.3.1 (8)(a), Chapter 11A, Section 1124A.3.2.1. Chapter 11A, Section 1143A.4. Chapter 11B, Section 1111B, 1115B.3, 1129B.4, 1133B.4.5.3, 1133B.7.1.3 and Figure 11B-11. Chapter 12, Matrix Adoption Table. Chapter 12, Section 1250.1 and 1250.4. Chapter 15, Section 1511.1. Chapter 16A, Section 1614A.1.13. Chapter 17A, Section 1714A.5.2. Chapter 18, Matrix Adoption Tables. Chapter 29, Fixture Table 2902.1. Chapter 31, Section 3109.4.4.2 trough 3109.4.4.8. Chapter 31A Clarify reference to Title 8 for provisions. Chapter 35, NFPA 13-02. Appendix Chapter 1, Section 101.4.2, 101.4.5, 102.6 and 103.3.
- 3. Emergency Standards pertaining to Required Accessible Parking (DSA-AC EF 01/08) On May 21, 2008 the California Building Standards Commission approved revised regulations proposed by DSA-AC implementing AB. 1531. The revised regulations become effective July 1, 2008 and are contained in California Building Code Sections 1129B.3 & 1129B.4, and Figures 11B-18A, 11B-18B & 11B-18C.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

# 2007 California Electrical Code Title 24 (T-24), Part 3 (Pt), California Code of Regulations (CCR)

# CALIFORNIA ARTICLE 89 GENERAL CODE PROVISIONS

Adopting Agency		B S C	S F M		HC	D	D	SA	(	OSI	-IPE	)	C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapte	r			1	2	1/AC	AC	SS	1	2	3	4								
		_																		
Adopt entire Californ sections listed below	ia as amended (amended /)																			
Adopt only those see	ctions that are listed below						Х													
Article / Section	Codes																			
89.109.1	CA						Х													

# SECTION 89.109 DIVISION OF THE STATE ARCHITECT

#### 89.109.1 DSA-AC - Division of the State Architect/Access Compliance.

**FPN:** For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect - Access Compliance see California Code of Regulations, Title 24, Part 2 (California Building Code), California Chapter 1 (General Code Provisions) under authority cited by Government Code Section 4450 and in reference cited by Government Code Sections 4450 through 4461, 12955.1 and Health and Safety Code Sections 18949.1, 19952 through 19959.

# **Chapter 4 Equipment for General Use**

# ARTICLE 404 Switches

Adopting Agency		B S C	S F M		HCI	D	DS	SA .		OSI	HPC	)	C S A	DHS	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire California sections listed below)	•																			
Adopt only those section	ections listed below) dopt only those sections that are listed below						Х													
Article / Section	Codes																			
404 FPN	CA						Х													

FPN: For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect - Access Compliance, for control and operating mechanisms see California Code of Regulations, Title 24, Part 2 (California Building Code), Section 1117B.6 Item 5 (Installation heights of electrical switches and receptacle outlets) #5.1 (Electrical switches) under authority cited by Gov. Code § 4450 and in reference cited by Gov. §4450 through 4461, 12955.1 and H&SC § 18949.1, 19952 through 19959.

# **Chapter 4 Equipment for General Use**

# ARTICLE 406 Receptacles, Cord Connectors, and Attachment Plugs (Caps)

Adopting Agency		B S C	S F M		HCI	D	DS	SA .		OSI	-IPE	)	C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
·																				
Adopt entire California as amended (amended sections listed below)																				
Adopt only those section	ons that are listed below						Х													
Article / Section	Codes																			
406 FPN	CA						Х													

FPN: For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect - Access Compliance, for control and operating mechanisms see California Code of Regulations, Title 24, Part 2 (California Building Code), Section 1117B.6 item 5 (Electrical switches and receptacle outlets) #5.2 (Electrical receptacle outlets) under authority cited by Gov. Code § 4450 and in reference cited by Gov. §4450 through 4461, 12955.1 and H&SC § 18949.1, 19952 through 19959.

# **Chapter 7 Special Conditions**

# ARTICLE 760 Fire Alarm Systems

Adopting Agency			S F M		HCI	)	DS	SA		OSH	HPC	)	C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire California as amended (amended sections listed below)																				
Adopt only those section	ons that are listed below						Х													
Article / Section	Codes																			
760 FPN	CA						Х													

**FPN:** For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect - Access Compliance, for control and operating mechanisms see California Code of Regulations, Title 24, Part 2 (California Building Code), Chapter 9, Section 907.3.2 under authority cited by Gov. Code § 4450 and in reference cited by Gov. §4450 through 4461, 12955.1 and H&SC § 18949.1, 19952 through 19959.

## **HISTORY NOTE APPENDIX**

# California Electrical Code California Code of Regulations, Title 24, Part 3

Notes

For prior history, see the History Note Appendix to the *California Electrical Code*, 2004 Triennial Edition, effective August 1, 2005.

1. (BSC 03/06, SFM 01/06, DSA-SS 04/06, OSHPD 05/06, DSA AC 04/06) Adoption by reference of the 2005 *National Electric Code (NEC)* with necessary state amendments and repeal of the 2002 edition of the NEC. Filed with the Secretary of State on February 15, 2007; effective on January 1, 2008.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

# 2007 California Mechanical Code Title 24 (T-24), Part 4 (Pt), California Code of Regulations (CCR)

# CALIFORNIA CHAPTER 1 GENERAL CODE PROVISIONS

Adopting Agency		B S C	S F M		HCI	)	DS	SA .		OSH	HPC	)	C S A	DHS	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire California as amended (amended sections listed below)																				
Adopt only those section	ons that are listed below						Х													
Article / Section	Codes																			
109.1	CA						Х													

#### 109.0 DIVISION OF THE STATE ARCHITECT

#### 109.1 Division of the State Architect — Access Compliance.

**Note:** For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect-Access Compliance see California Code of Regulations, Title 24, Part 2 (California Building Code), California Chapter 1 (General Code Provisions) under authority cited by Government Code Section 4450 and in reference cited by Government Code Sections 4450 through 4461, 12955.1 and Health and Safety Code Sections 18949.1, 19952 through 19959.

# **HISTORY NOTE APPENDIX**

# California Mechanical Code California Code of Regulations, Title 24, Part 4

For prior history, see the History Note Appendix to the *California Mechanical Code* 2001 Triennial Edition effective November 1, 2002.

1. (BSC 04/06, DSA-AC 05/06, DSA-SS 05/06, HCD 06/06, OSHPD 06/06, SFM 02/06) Adoption by reference of the 2006 *Uniform Mechanical Code* (UMC) with necessary state amendments and repeal of the 2000 edition of the UMC. Filed with the Secretary of State on February 15, 2007 and February 21, 2007; effective on January 1, 2008.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

# 2007 California Plumbing Code Title 24 (T-24), Part 5 (Pt), California Code of Regulations (CCR)

# CALIFORNIA CHAPTER 1 GENERAL CODE PROVISIONS

Adopting Agency				g Agency		S F M		HCI	)	DS	SA		OSH	HPD	)	C S A	DHS	A G R	D W R	CEC	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4											
Adopt entire California as amended (amended sections listed below)																							
Adopt only those section	ons that are listed below						Х																
Article / Section	Codes																						
109.1	CA						Х																

#### SECTION 109.0 DIVISION OF THE STATE ARCHITECT

#### 109.1 Division of the State Architect - Access Compliance.

**Note:** For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect-Access Compliance see California Code of Regulations, Title 24, Part 2 (California Building Code), California Chapter 1 (General Code Provisions) under authority cited by Government Code Section 4450 and in reference cited by Government Code Sections 4450 through 4461, 12955.1 and Health and Safety Code Sections 18949.1, 19952 through 19959.

# CHAPTER 4 PLUMBING FIXTURES AND FIXTURE FITTINGS

**Note:** For applications listed in Section 109.1 of the California Building Code, regulated by the Division of the State Architect-Access Compliance see California Code of Regulations, Title 24, Part 2 (California Building Code), California Chapter 1 (General Code Provisions) under authority cited by Government Code Section 4450 and in reference cited by Government Code Sections 4450 through 4461, 12955.1 and Health and Safety Code Sections 18949.1, 19952 through 19959.

Adopting Agency		B S C	S F N		HCI	D	DS	SA		OSI	-IPE	)	C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire California as amended (amended sections listed below)																				
Adopt only those sections	Adopt only those sections that are listed below						Х													
Article / Section	Codes																			
412.1.1	CA						Х													
Table 4-1  1st paragraph only  8	<u>CA</u>						<u>x</u>													
Table 4-1 Footnote 19	CA						Х													

# SECTION 412.0 MINIMUM NUMBER OF REQUIRED FIXTURES

#### 412.1 Fixture Count.

**412.1.1 [DSA—AC]** Effective January 1, 1990, in new construction and those existing facilities which occupancy type are listed in Tables 4-1 and 4-4 for public use, which apply for permit to undertake construction, structural alterations, repairs or improvement which exceed 50 percent of the square footage of the entire facility, shall install water closets, urinals, lavatories and drinking fountains as stipulated in Tables 4-1 and 4-4 for public use. Community and/or municipal parks with a bleacher capacity not exceeding 500 seats shall be exempt fro the requirements of this section and Tables 4-1 and 4-4. Each bathroom shall comply with Part 2, Chapters 11A and 11B of the California Building Code.

# TABLE 4-1 MINIMUM PLUMBING FACILITIES

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction. For requirements for persons with disabilities, *Chapter 11A or 11B of the California Building Code, shall* be used.

Footnote 19. [DSA-AC] In accordance with Sections 108.7 and 301.2, the Authority Having Jurisdiction may approve alternative design criteria when determining the minimum number of plumbing fixtures.

<sup>8</sup> Pending CBSC Errata for the 2007 Triennial Edition of Title 24, 2007 California Building Code. Corrections are made in the Matrix Adoption Table, as shown in strikeout (strikeout) and underline (underline).

## **HISTORY NOTE APPENDIX**

# California Plumbing Code California Code of Regulations, Title 24, Part 5 (Pt 5)

For prior history, see the History Note Appendix to the *California Plumbing Code* 2001 Triennial Edition effective November 1, 2002.

1. (BSC 05/06, DSA-AC 06/06, DSA-SS 06/06, HCD 03/06, OSHPD 07/06, SFM 03/06) Adoption by reference of the 2006 *Uniform Plumbing Code* (UPC) with necessary state amendments and repeal of the 2000 edition of the UPC. Filed with the Secretary of State on February 15, 2007 and effective on January 1, 2008.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

# 2007 California Historical Building Code Title 24 (T-24), Part 8 (Pt), California Code of Regulations (CCR)

# CHAPTER 8-1 ADMINISTRATION

Note. The California Historical Building Code, Part 8 of Title 24, governs for all qualified historical buildings or properties in the State of California.

# SECTION 8-101 TITLE, PURPOSE AND INTENT

**8-101.1 Title.** These regulations shall be known as the *California Historical Building Code* and will be referred to herein as "the CHBC."

**8-101.2 Purpose.** The purpose of the CHBC is to provide regulations for the preservation, restoration, rehabilitation, relocation or reconstruction, of buildings or properties designated as qualified historical buildings or properties (Chapter 8-2). The CHBC is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide access for persons with disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users. The CHBC requires enforcing agencies to accept solutions that are reasonably equivalent to the regular code (as defined in Chapter 8-2) when dealing with qualified historical buildings or properties.

**8-101.3 Intent.** The intent of the CHBC is to facilitate the preservation and continuing use of qualified historical buildings or properties while providing reasonable safety for the building occupants and access for people with disabilities.

#### SECTION 8-102 APPLICATION

- **8-102.1 Application.** The CHBC is applicable to all issues regarding building code compliance for qualified historical buildings or properties. The CHBC may be used in conjunction with the regular code to provide solutions to facilitate the preservation of qualified historical buildings or properties. The CHBC shall be used by any agency with jurisdiction and whenever compliance with the code is required for qualified historical buildings or properties.
  - The state or local enforcing agency, shall apply the provisions of the CHBC in permitting repairs, alterations, and additions necessary for the preservation, restoration, reconstruction, rehabilitation, relocation or continued use of a qualified historical building or property when so elected by the private property owner.
  - 2. **State agencies.** All state agencies shall apply the provisions of in the CHBC in permitting repairs, alterations, and additions necessary for the preservation, restoration, rehabilitation, safety, relocation, reconstruction, or continued use of qualified historical buildings or properties.
  - **8-102.1.1 Additions, alterations and repairs.** It is the intent of the CHBC to allow non-historical expansion or addition to a qualified historical building or property provided: non-historical additions shall conform to the requirements of the regular code. See Chapter 8-2.
  - **8-102.1.2 Relocation.** Relocated qualified historical buildings or properties shall be sited to comply with the regular code or with the solutions listed in the CHBC. Nonhistorical new construction related to relocation shall comply with regular code. Reconstruction and restoration related to relocation is permitted to comply with the provisions in the CHBC.

- 8-102.1.3 Change of occupancy. For change of use or occupancy, see Chapter 8-3, Use and Occupancy
- **8-102.1.4 Continued use.** Qualified historical buildings or properties may have their existing use or occupancy continued if such use or occupancy conformed to the code or to the standards of construction in effect at the time of construction, and such use or occupancy does not constitute a distinct hazard to life safety as defined in this code the CHBC.
- **8-102.1.5 Unsafe buildings or properties.** When a qualified historical building or property is determined to be unsafe as defined in the regular code, the requirements of the CHBC are applicable to the work necessary to correct the unsafe conditions. Work to remediate the buildings or properties need only address the correction of the unsafe conditions, and it shall not be required to bring the entire qualified historical building or property into compliance with regular code.
- **8-102.1.6 Additional work.** Qualified historical buildings and or properties shall not be subject to additional work required by the regular code, regulation or ordinance beyond that required to completing complete the work undertaken. Certain exceptions for access accessibility and for distinct hazards exist by mandate and may require specific action, within the parameters of the CHBC.

# SECTION 8-103 ORGANIZATION AND ENFORCEMENT

- **8-103.1 Authority.** The state or local enforcing agency, pursuant to authority provided under Section 18954 of the Health and Safety Code, shall administer and enforce the provisions of the CHBC in permitting repairs, alterations, and additions necessary for the preservation, restoration, reconstruction, rehabilitation, relocation or continued use of a qualified historical building or property.
- **8-103.2 State enforcement.** All state agencies pursuant to authority provided under Section 18954 and Section 18961 of the Health and Safety Code shall administer and enforce the CHBC with respect to qualified historical buildings or properties under their respective jurisdiction.
- **8-103.3 Liability.** Prevailing law regarding immunity of building officials is unaffected by the use and enforcement of the CHBC.

#### SECTION 8-104 REVIEW AND APPEALS

- **8-104.1 State Historical Building Safety Board (SHBSB).** In order to provide for interpretation of the provisions of the CHBC and to hear appeals, the SHBSB shall act as an appeal and review body to state and local agencies and any affected party.
- **8-104.2 SHBSB review.** When a proposed design, material or method of construction is being considered by the enforcing agency, the agency chief, the building official or the local board of appeals may file a written request for opinion to the SHBSB for its consideration, advice or findings. In considering such request, the SHBSB may seek the advice of other appropriate private or public boards, individuals, or state or local agencies. The SHBSB shall, after considering all of the facts presented, including any recommendation of other appropriate boards, agencies or other parties, determine if, for the purpose intended, the proposal is reasonably equivalent to that allowed by these regulations in proposed design, material or method of construction, and it shall transmit such findings and its decision to the enforcing agency for its application. The Board may recover the costs of such reviews and shall report the decision in printed form, copied to the California Building Standards Commission.
  - **8-104.2.1 State agencies.** All state agencies with ownership of, or that act on behalf of state agency owners of qualified historical buildings or properties, shall consult and obtain SHBSB review prior to taking action or making decisions or appeals that affect qualified historical buildings or properties, per section 18961 of Health and Safety Code.

- **8-104.2.2 Imminent threat.** Where an emergency is declared and a qualified historical building or property is declared an imminent threat to life and safety, the state agency assessing such a threat shall consult with the SHBSB before any demolition is undertaken, per section 18961 of Health and Safety Code.
- **8-104.3 SHBC appeals.** If any local agency administering and enforcing the CHBC or any person adversely affected by any regulation, rule, omission, interpretation, decision, or practice of the agency enforcing the CHBC wishes to appeal the issue for resolution to the SHBSB, either of these parties may appeal directly to the Board. The Board may accept the appeal only if it determines that issues involved are of statewide significance. The Board may recover the costs of such reviews and shall make available copies of decisions in printed form at cost, copied to the California Building Standards Commission.
- **8-104.4 Local agency fees.** Local agencies, when actively involved in the appeal, may also charge affected persons reasonable fees not to exceed the cost of obtaining reviews and appeals from the Board.

# SECTION 8-105 CONSTRUCTION METHODS AND MATERIALS

- **8-105.1 Repairs.** Repairs to any portion of a qualified historical building or property may be made in-kind with historical materials and the use of original or existing historical methods of construction, subject to conditions of the CHBC. (See Chapter 8-8.)
- **8-105.2 Solutions to the** *California Historical Building Code.* Solutions provided in the CHBC, or any other acceptable regulation or methodology of design or construction and used in whole or in part, with the regular code, or with any combination of the regular code and the CHBC, shall be allowed. The CHBC does not preclude the use of any proposed alternative or method of design or construction not specifically prescribed or otherwise allowed by these regulations. Any alternative may be submitted for evaluation to the appropriate enforcing agency for review and acceptance. The enforcing agency may request that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding such solutions. Any alternative offered in lieu of that prescribed or allowed in the CHBC shall be reasonably equivalent in quality, strength, effectiveness, durability and safety to that of the CHBC.

#### SECTION 8-106 SHBSB RULINGS

**8-106.1 General.** Rulings of the SHBSB (i.e. formal appeals, case decisions, code interpretations and administrative resolutions, etc.) that are issues of statewide application are required to be submitted to the California Building Standards Commission in printed form. These rulings may be used to provide guidance for similar cases or issues.

# CHAPTER 8-2 DEFINITIONS

#### SECTION 8-201 DEFINITIONS

For the purpose of the CHBC, certain terms and phrases, words, and their derivatives shall be construed as specified in this chapter. Additional definitions and/or terms may appear in the various other chapters relative to terms or phrases primarily applicable thereto. Any reference to "authority having jurisdiction" does not necessarily preclude the appellate process of Section 8-104.3.

**ADDITION.** A non-historical extension or increase in floor area or height of a building or property.

**ALTERATION.** A modification to a qualified historical building or property that affects the usability of the building or property, or part thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historical restoration, changes or rearrangement of the structural parts or elements, and changes or rearrangements in the plan configuration of walls and full-height partitions.

**BUILDING STANDARD.** Any guideline, regulation or code that may be applied to a qualified historical building or property.

**CHARACTER-DEFINING FEATURE.** Those visual aspects and physical elements that comprise the appearance of an a historical building, or property, and that are significant to its historical, architectural and cultural values, including the overall shape of the historical building or property, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.

**CULTURAL RESOURCE.** Building, site, property, object, or district evaluated as having significance in pre-history or history.

**DISTINCT HAZARD.** Any clear and evident condition that exists as an immediate danger to the safety of the occupants or the public right of way. Conditions that do not meet the requirements of current regular codes and ordinances do *not*, of themselves, constitute a distinct hazard. Section 8-104.3, SHBC appeals, remains applicable.

**ENFORCING AGENCY.** Authority Having Jurisdiction, Local Agency with Jurisdiction, agency. An entity with the responsibility for regulating, enforcing, reviewing or otherwise that exerts control of or administration over the process of granting permits, approvals, decisions, variances, appeals for gualified historical buildings or properties.

**EXIT LADDER DEVICE.** An exit ladder device is a permanently installed, fixed, folding, retractable, or hinged ladder intended for use as a means of emergency egress from areas of the second or third stories. Unless approved specifically for a longer length, the ladder shall be limited to 25 feet (7620 mm) in length. Exit ladders are permitted where the area served by the ladder has an occupant load of less than 10 persons.

**FIRE HAZARD.** Any condition which increases, or may contribute to an increase in the hazard or menace of fire to a greater degree than customarily recognized by the authority having jurisdiction, or any condition or act which could obstruct, delay, hinder or interfere with the operations of firefighting personnel or the egress of occupants in the event of fire. Section 8-104.3 SHBC Appeals remain applicable.

**HISTORICAL FABRIC OR MATERIALS.** Original and later-added historically significant construction materials, architectural finishes or elements in a particular pattern or configuration which form a qualified historical property, as determined by the authority having jurisdiction.

**HISTORICAL SIGNIFICANCE.** Importance for which a property has been evaluated and found to be historical, as determined by the authority having jurisdiction.

**IMMINENT THREAT.** Any condition within or affecting a qualified historical building or property which, in the opinion of the authority having jurisdiction, would qualify a building or property as dangerous to the extent that the life, health, property or safety of the public, its occupants or those performing necessary repair, stabilization or shoring work are in immediate peril due to conditions affecting the building or property. Potential hazards to persons using, or improvements within, the right-of-way may not be construed to be "imminent threats" solely for that reason if the hazard can be mitigated by shoring, stabilization, barricades or temporary fences.

**INTEGRITY.** Authenticity of a building or property's historical identity, evidenced by the survival of physical characteristics that existed during the property's historical or prehistorical period of significance.

**LIFE SAFETY EVALUATION.** An evaluation of the life-safety hazards of a qualified historical building or property based on procedures similar to those contained in NFPA 909, *Standard for the Protection of Cultural Resources, Appendix B, Fire Risk Assessment in Heritage Premises.* 

LIFE SAFETY HAZARD. See Distinct Hazard.

**PERIOD OF SIGNIFICANCE.** The period of time when a qualified historical building or property was associated with important events, activities, or persons, or attained the characteristics for its listing or registration.

**PRESERVATION.** The act or process of applying measures necessary to sustain the existing form, integrity, and materials of a qualified historical building or property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historical materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make properties functional is appropriate within a preservation project.

**QUALIFIED HISTORICAL BUILDING OR PROPERTY.** As defined in Health and Safety Code Section 18955 as "Qualified Historical Building or Property." Any building, site, object, place, location, district or collection of structures, and their associated sites, deemed of importance to the history, architecture, or culture of an area by an appropriate local, state or federal governmental jurisdiction. This shall include historical buildings or properties on, or determined eligible for, national, state or local qualified historical registers or inventories, such as the National Register of Historical Places, California Register of Historical Resources, State Historical Landmarks, State Points of Historical Interest, and city or county registers, inventories or surveys of historical or architecturally significant sites, places or landmarks.

**RECONSTRUCTION.** The act or process of depicting, by means of new construction, the form, features, and detailing of a nonsurviving site, landscape, building, property or object for the purpose of replicating its appearance at a specific period of time.

**REGULAR CODE.** The adopted regulations that govern the design and construction or alteration of nonhistorical buildings and properties within the jurisdiction of the enforcing agency.

**REHABILITATION.** The act or process of making possible a compatible use for qualified historical building or property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

**RELOCATION.** The act or process of moving any qualified historical building or property or a portion of a qualified historical building or property to a new site, or a different location on the same site

**REPAIR.** Renewal, reconstruction, or renovation of any portion of an existing property, site or building for the purpose of its continued use.

**RESTORATION.** The act or process of accurately depicting the form, features, and character of a qualified building or property as it appeared at a particular period of time by the means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

**STRUCTURE.** That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

**TREATMENT.** An act of work to carry out preservation, restoration, stabilization, rehabilitation, or reconstruction.

# CHAPTER 8-3 USE AND OCCUPANCY

#### SECTION 8-301 PURPOSE AND SCOPE

- **8-301.1 Purpose.** The purpose of the CHBC is to provide alternative regulations for the determination of occupancy classifications and conditions of use for buildings or structures designated as qualified historical buildings or properties.
- **8-301.2 Scope.** Every qualified historical building or property for which a permit or approval has been requested shall be classified prior to permit issuance according to its use or the character of its occupancy in accordance with regular code and applicable provisions of this chapter.

#### SECTION 8-302 GENERAL

- **8-302.1 Existing use.** The use or character of occupancy of a qualified historical building or property, or portion thereof, shall be permitted to continue in use regardless of any period of time in which it may have remained unoccupied, or in other uses, provided such building or property otherwise conforms to all applicable requirements of the CHBC.
- **8-302.2 Change in occupancy.** The use or character of the occupancy of a qualified historical building or property may be changed from or returned to its historical use or character provided the qualified historical building or property conforms to the requirements applicable to the new use or character of occupancy as set forth in the CHBC. Such change in occupancy shall not mandate conformance with new construction requirements as set forth in regular code.
- **8-302.3 Occupancy separations.** Required occupancy separations of more than one hour may be reduced to one-hour fire-resistive construction with all openings protected by not less than three-fourths-hour fire-resistive assemblies of the self-closing or automatic-closing type when the building is provided with an approved automatic sprinkler system throughout the entire building in accordance with section 8-410.4. Doors equipped with automatic-closing devices shall be of a type which will function upon activation of a device which responds to products of combustion other than heat.

Required occupancy separations of one hour may be omitted when the building is provided with an approved automatic sprinkler system throughout.

**8-302.4 Maximum floor area.** Regardless of the use or character of occupancy, the area of a one-story qualified historical building or property may have, but shall not exceed, a floor area of 15,000 square feet (1393.5 m ) unless such an increase is otherwise permitted in regular code. Multistory qualified historical buildings (including basements and cellars) shall be in accordance with regular code requirements

Exception: Historical buildings may be unlimited in floor area without fire-resistive area separation walls:

- 1. When provided with an approved automatic sprinkler, or
- Residential occupancies, of two stories or less when provided with a complete fire alarm and annunciation system and where the exiting system conforms to regular code.
- **8-302.5 Maximum height.** The maximum height and number of stories of a qualified historical building or property shall not be limited because of construction type, provided such height or number of stories does not exceed that of its historical design.

- **8-302.5.1 High-rise buildings.** Occupancies B, F-1, F-2 or S in high rise buildings with floors located more than 75 feet above the lowest floor level having building access, may be permitted with only the stories over 75 feet provided with an automatic fire sprinkler system if:
  - 1. The building construction type and the exits conform to regular code and
  - 2. A complete building fire alarm and annunciation system is installed and,
  - 3. A fire barrier is provided between the sprinklered and nonsprinklered floors
- 8-302.6 Fire-resistive construction. See Chapter 8-4.
- **8-302.7 Light and ventilation.** Existing provisions for light and ventilation which do not, in the opinion of the enforcing agency, constitute a safety hazard may remain. See Section 8-303.6 for residential requirements. See Section 8-503 for Escape or Rescue Windows and Doors

# SECTION 8-303 RESIDENTIAL OCCUPANCIES

- **8-303.1 Purpose.** The purpose of this section is to provide regulations for those buildings designated as qualified historical buildings or properties and classified as occupancies. The CHBC requires enforcing agencies to accept any reasonably equivalent to regular code when dealing with qualified historical buildings and properties
- **8-303.2 Intent.** The intent of the CHBC is to preserve the integrity of qualified historical buildings and properties while maintaining a reasonable degree of protection of life, health and safety for the occupants.
- **8-303.3 Application and scope.** The provisions of this section shall apply to all qualified historical buildings used for human habitation. Those dwelling units intended only for display, or public use with no residential use involved, need not comply with the requirements of this section
- 8-303.4 Fire escapes. See Chapter 8-5.
- **8-303.5 Room dimensions.** Rooms used for sleeping purposes may contain a minimum of 50 square feet (4.6 m<sup>2</sup>) floor area, provided there is maintained an average ceiling height of 7 feet (2134 mm). Other habitable rooms need only be of adequate size to be functional for the purpose intended.
- **8-303.6 Light and ventilation.** Windows in habitable rooms shall have an area of 6 percent of the floor area, or 6 square feet (0.56 m<sup>2</sup>), whichever is greater. Windows in sleeping rooms shall be openable (See Section 8-503). Residential occupancies need not be provided with electrical lighting.
- **8-303.7 Alteration and repair.** The alteration and repair of qualified historical buildings or properties may permit the replacement, retention and extension of original materials and the continued use of original methods of construction provided a life-safety hazard is not created or continued. Alterations and repairs shall be consistent with the CHBC.

The amount of alterations and repairs is not limited provided there is no nonhistorical increase in floor area, volume, or size of the building or property.

8-303.8 Exiting. See Chapter 8-5.

## CHAPTER 8-4 FIRE PROTECTION

# SECTION 8-401 PURPOSE, INTENT AND SCOPE

- **8-401.1 Purpose.** The purpose of this chapter is to provide for fire protection of qualified historical buildings or properties. The CHBC requires enforcing agencies to accept any reasonably equivalent to the regular code when dealing with qualified historical buildings or properties.
- **8-401.2 Intent.** The intent of the CHBC is to preserve the integrity of qualified historical buildings or properties while maintaining a reasonable degree of fire protection based primarily on the life safety of the occupants and firefighting personnel
- 8-401.3 Scope. This chapter shall apply when required by the provisions of Section 8-102.

#### SECTION 8-402 FIRE-RESISTIVE CONSTRUCTION

- **8-402.1 Exterior wall construction.** The fire resistance requirement for existing exterior walls and existing opening protection may be satisfied when an automatic sprinkler system designed for exposure protection is installed per the CHBC. The automatic sprinklers may be installed on the exterior with at least one sprinkler located over each opening required to be protected. Additional sprinklers shall also be distributed along combustible walls under the roof lines that do not meet the fire-resistive requirement due to relationship to property lines as required by regular code. Such sprinkler systems may be connected to the domestic water supply on the supply-main side of the building shut-off valve. A shut-off valve may be installed for the sprinkler system provided it is locked in an open position
- **8-402.2 One-hour construction.** Upgrading an existing qualified historical building or property to one-hour fire-resistive construction and one-hour fire resistive corridors shall not be required regardless of construction or occupancy when one of the following is provided:
  - 1. An automatic sprinkler system throughout. See Section 8-410.2 for automatic sprinkler systems.
  - 2. An approved life-safety evaluation.
  - 3. Other alternative measures as approved by the enforcing agency.
- **8-402.3 Openings in fire-rated systems.** Historical glazing materials and solid wood unrated doors in interior walls required to have one-hour fire rating may be approved when operable windows and doors are provided with appropriate smoke seals and when the area affected is provided with an automatic sprinkler system. See Section 8-410 for automatic sprinkler systems.

#### SECTION 8-403 INTERIOR FINISH MATERIALS

New nonhistorical interior wall and ceiling finish shall conform to the provisions of the regular code. Existing nonconforming materials used for wood lath and plaster walls, see Section 8-404.

Exception: When an approved automatic sprinkler system is provided throughout the building, existing finishes shall be approved.

# SECTION 8-404 WOOD LATH AND PLASTER

Wood lath and plaster walls may be considered in accordance with codes, standards, and listings published prior to 1943 whereby a wood stud wall assembly with gypsum or lime plaster on hand split or sawn wooden lath obtains a one-half-hour fire-resistive rating. This rating may be increased for interior walls to as much as one hour by filling the wall with mineral fiber or glass fiber.

SECTION 8-405
OCCUPANCY SEPARATION

See Chapter 8-3.

SECTION 8-406
MAXIMUM FLOOR AREA

See Chapter 8-3.

#### SECTION 8-407 VERTICAL SHAFTS

Vertical shafts need not be enclosed when such shafts are blocked at every floor level by the installation of not less than 2 full inches (51 mm) of solid wood or equivalent construction installed so as to prevent the initial passage of smoke and flame. Automatic sprinkler systems or other solutions may be considered on a case-by-case basis, in lieu of enclosure of vertical shafts and stairwells.

#### SECTION 8-408 ROOF COVERING

Existing or original roofing materials may be repaired or reconstructed subject to the following requirements:

- 1. The original or historical roofing system shall be detailed or modified as necessary in order to be capable of providing shelter while preserving the historical materials and appearance of the roof.
- 2. Wooden roof materials may be utilized where fire resistance is required provided they are treated with fire-retardant treatments to achieve a Class "B" roof covering rating. Wood roofing in state designated Urban Wildland and High Fire Zones shall be permitted when installed in class "A" assemblies.
- 3. Jurisdictions that prohibit wood roofing materials for application as roof coverings and roof assemblies shall submit documentation for the adoption. Express Terms, statement of reasons and minutes of the action by the adopting authority Health and Safety Code, Section 18959(f).

#### SECTION 8-409 FIRE ALARM SYSTEMS

Every qualified historical building or property shall be provided with fire alarm systems as required for the use or occupancy by regular code or other approved alternative

# SECTION 8-410 AUTOMATIC SPRINKLER SYSTEMS

**8-410.1** Every qualified historical building or property which cannot be made to conform to the construction requirements specified in the regular code for the occupancy or use, and which constitutes a distinct fire hazard, (for definition of "distinct hazard", see Chapter 8-2), shall be deemed to be in compliance if provided with an automatic sprinkler system, or a life-safety system or other technologies as approved by the enforcing agency. ("Automatic" is defined in regular code. Sprinkler System is defined in this section.)

**8-410.2** When required by the CHBC, an automatic sprinkler systems is defined by the following standards (for nonhazardous occupancies).

- 1. Buildings of four stories or less; NFPA 13R, 2002 edition.
- 2. For floors above the fourth, NFPA 13, 2002 SFM amended edition.
- 3. Buildings with floors above 75 feet, NFPA 13, 2002 edition.
- 4. When the building is free standing or with property line separation, two floors and 1500 sf per floor or less, NFPA 13D, 2002 edition.
- 5. For exterior wall and opening protection. As required by this section.

**Exception**: When the automatic sprinkler systems are used to reach compliance using this code, in three or more occasions, the system shall be NFPA Standard 13D shall be increased to NFPA 13R Standard, or NFPA 13R standard shall be increased to NFPA 13 standard.

- **8-410.3** Automatic sprinkler systems shall not be used to substitute for or act as an alternate to the required number of exits from any facility. (See Chapter 8-5 for exiting requirements.)
- **8-410.4** An automatic sprinkler system shall be provided in all detention facilities.

# SECTION 8-411 OTHER TECHNOLOGIES

Fire alarm systems, smoke and heat detection systems, occupant notification and annunciation systems, smoke control systems and fire modeling, timed egress analysis and modeling, as well as other engineering methods and technologies may be accepted by the enforcing agency to address areas of non-conformance.

#### SECTION 8-412 HIGH-RISE BUILDINGS

Qualified historical buildings having floors for human occupancy located more than 75 feet above the lowest floor level having building access shall conform to the provisions of the regular code for existing high-rise buildings as amended by the CHBC.

# CHAPTER 8-5 MEANS OF EGRESS

# SECTION 8-501 PURPOSE, INTENT AND SCOPE

- **8-501.1 Purpose.** The purpose of this chapter is to establish minimum means of egress regulations for qualified historical buildings or properties. The CHBC requires enforcing agencies to accept reasonably equivalent alternatives to the means of egress requirements in the regular code.
- **8-501.2 Intent.** The intent of these regulations to provide an adequate means of egress.
- **8-501.3 Scope.** Every qualified historical building or portion thereof shall be provided with exists as required the CHBC when required by the provisions of Section 8-102.

#### SECTION 8-502 GENERAL

- **8-502.1 General.** The enforcing agency shall grant reasonable exceptions to the specific provisions of applicable egress regulations where such exceptions will not adversely affect life safety.
- **8-502.2** Existing door openings and corridor widths of less than dimensions required by regular code shall be permitted where there is sufficient width and height for the occupants to pass through the opening or traverse the exit.
- **8-502.3 Stairs.** Existing stairs having risers and treads, or width at variance with the regular code are allowed if determined by the enforcing agency to not constitute a distinct hazard. Handrails with nonconforming grip size or extensions are allowed if determined by the enforcing agency to not constitute a distinct hazard.
- **8-502.4 Main entry doors**. The front or main entry doors need not be re-hung to swing in the direction of exit travel, provided other means or conditions of exiting, as necessary to serve the total occupant load, are provided.
- **8-502.5 Existing fire escapes.** Existing previously approved fire escapes and fire escape ladders shall be acceptable as on one of the required means of egress, provided they extend to the ground and are easily negotiated, adequately signed, and in good working order. Access shall be by an opening having a minimum width of 29 inches (737mm) when open with a sill be no more than 30 inches (762 mm) above the adjacent floor, landing, or approved step.
- **8-502.6 New fire escapes and fire escape ladders**. New fire escapes and fire escape ladders which comply with this section shall be acceptable as one of the required means of egress. New fire escapes and new fire escape ladders shall comply with the following:
  - 1. Access from a corridor shall not be through an intervening room.
  - 2. All openings within 10 feet (3048 mm) shall be protected by three-fourths-hour fire assemblies. When located within a recess or vestibule, adjacent enclosure walls shall be of not less than one-hour fire-resistive construction.
  - 3. Egress from the building shall be by a clear opening having a minimum dimension of not less than 29 inches (737 mm). Such openings shall be openable from the inside without the use of a key or special knowledge or effort. The sill of an opening giving access shall not be more than 30 inches (737mm) above the floor, step or landing of the building or balcony.

- 4. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.79 kN/ m ) and shall be provided with a top and intermediate handrail on each side. The pitch of the stairway shall not exceed 72 degrees with a minimum width of 18 inches (457 mm). Treads shall not be less than 4 inches (102 mm) in width and the rise between treads shall not exceed 10 inches (254 mm). All stair and balcony railings shall support a horizontal force of not less than 50 pounds per lineal foot (729.5 N/m ) of railing.
- 5. Balconies shall not be less than 44 inches (1118 mm) in width with no floor opening other than the stairway opening greater than 5/8 inch in width. Stairway openings in such balconies shall not be less than 22 inches by 44 inches (559 by 1118 mm). The balustrade of each balcony shall not be less than 36 inches (914 mm) high with not more than 9 inches (287 mm) between balusters.
- 6. Fire escapes shall extend to the roof or provide an approved gooseneck ladder between the top floor landing and the roof when serving buildings four or more stories in height having roofs with less than 4 units vertical in 12 units' horizontal (33.3 percent slope). Fire escape ladders shall be designed and connected to the building to withstand a horizontal force of 100 pounds (445 N) placed anywhere on the rung. All ladders shall be at least 15 inches (381 mm) wide, located within 12 inches (305 mm) of the building. Ladder rungs shall be ¾ inch (19.1 mm) in diameter and shall be located 12 inches (305 mm) on center. Openings for roof access ladders through cornices and similar projections shall have minimum dimensions of 30 inches by 33 inches (762 by 838 mm).

The length of fire escapes and exit ladder devices shall be limited to that approved by the building official based on products listed by a recognized testing laboratory.

- 7. The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escapes shall extend to the ground or be provided with counterbalanced stairs reaching to the ground.
- 8. Fire escapes shall not take the place of stairways required by the codes under which the building was constructed.
- 9. Fire escapes shall be kept clear and unobstructed at all times and maintained in good working order.

# SECTION 8-503 ESCAPE OR RESCUE WINDOWS AND DOORS

Basements in dwelling units and every sleeping room below the fourth floor shall have at least one openable window or door approved for emergency escape which shall open directly into a public street, public way, yard or exit court. Escape or rescue windows or doors shall have a minimum clear area of 3.3 square feet (0.31 m ) and a minimum width or height dimension of 18 inches (457 mm) and be operable from the inside to provide a full, clear opening without the use of special tools.

# SECTION 8-504 RAILINGS AND GUARDRAILS

The height of railings and guard railings and the spacing of balusters may continue in their qualified historical height and spacing unless a distinct hazard has been identified or created by a change in use or occupancy.

# CHAPTER 8-6 ACCESSIBILITY

#### SECTION 8-601 PURPOSE, INTENT AND SCOPE

**8-601.1 Purpose.** The purpose of the CHBC is to provide alternative regulations to facilitate access and use by people with disabilities to and throughout facilities designated as qualified historical buildings or properties. These regulations require enforcing agencies to accept alternatives to regular code when dealing with qualified historical buildings or properties.

**8-602.2 Intent** The intent of this chapter to preserve the integrity of qualified historical buildings and properties while providing access to and use by people with disabilities.

**8-601.3 Scope.** The CHBC shall apply to every qualified historical building or property that is required to provide access to people with disabilities.

- 1. Provisions of this chapter do not apply to new construction or reconstruction/replicas of historical buildings.
- 2. Where provisions of this chapter apply to alteration of qualified historical buildings or properties, alteration is defined in *California Building Code* (CBC), Chapter 2, Definitions and Abbreviations. 202 A. Alter or Alteration.

**8-601.4 General application.** The provisions in the CHBC apply to local, state and federal governments (Title II entities); alteration of commercial facilities and places of public accommodation (Title III entities); and barrier removal in commercial facilities and places of public accommodation (Title III entities). Except as noted in this chapter.

#### SECTION 8-602 BASIC PROVISIONS

**8-602.1 Regular code.** The regular code for access for people with disabilities (Title 24, Part 2, Vol.1, Chapter 11B) shall be applied to qualified historical buildings or properties unless strict compliance with the regular code will threaten or destroy the historical significance or character-defining features of the building or property.

**8-602.2 Alternative provisions.** If the historical significance or character-defining features are threatened, alternative provisions for access may be applied pursuant to this chapter provided the following conditions are met:

- 1. These provisions shall be applied only on an item-by-item or case-by-case basis.
- Documentation is provided, including meeting minutes or letters, stating the reasons for the application of the alternative provisions. Such documentation shall be retained in the permanent file of the enforcing agency.

# **SECTION 8-603 ALTERNATIVES**

**8-603.1 Alternative minimum standards**. The alternative minimum standards for alterations of qualified historical buildings or facilities are contained in Section 4.1.7(3) of ADA Standards for Accessible Design, as incorporated and set forth in federal regulation 28 C.F.R Pt. 36.

**8-603.2 Entry.** These alternatives do not allow exceptions for the requirement of level landings in front of doors, except as provided in Section 8-603.4.

- 1. Access to any entrance used by the general public and no further than 200 feet (60 960 mm) from the primary entrance.
- 2. Access at any entrance not used by general public but open and unlocked with directional signs at the primary entrance and as close as possible to, but no further than 200 feet (60 960 mm) from, the primary entrance.
- The accessible entrance shall have a notification system. Where security is a problem, remote monitoring may be used.

#### 8.603.3 Doors. Alternatives listed in order of priority are:

- 1. Single-leaf door which provides a minimum 30 inches (762 mm) of clear opening.
- 2. Single-leaf door which provides a minimum 29½ inches (749mm) clear opening
- 3. Double door, one leaf of which provides a minimum 29½ inches (749mm) clear opening.
- 4. Double doors operable with a power-assist device to provide a minimum 29½ inches (749mm) clear opening when both doors are in the open position.

**8-603.4 Power-assisted doors.** Power-assisted door or doors may be considered an equivalent alternative to level landings, strikeside clearance and door-opening forces required by regular code.

**8-603.5 Toilet rooms.** In lieu of separate-gender toilet facilities as required in the regular code, an accessible unisex toilet may be designated.

#### 8-603.6 Exterior and interior ramps and lifts. Alternatives listed in order of priority are:

- 1. A lift or a ramp of greater than standard slope but no greater than 1:10, for horizontal distances not to exceed <u>5</u> feet (1525 mm). Signs shall be posted at upper and lower levels to indicate steepness of the slope.
- 2. Access by ramps of 1:6 slope for horizontal distance not to exceed 13 inches (330 mm). Signs shall be posted at upper and lower levels to indicate steepness of the slope.

#### SECTION 8-604 EQUIVALENT FACILITATION

Use of other designs and technologies, or deviation from particular technical and scoping requirements, are permitted if the application of the alternative provisions contained in Section 8-603 would threaten or destroy the qualified historical significance or character-defining features of the historical building or property.

- 1. Such alternatives shall be applied only on an item-by-item or case-by-case basis.
- Access provided by experiences, services, functions, materials and resources through methods including, but not limited to, maps, plans, videos, virtual reality, and related equipment, at accessible levels. The alternative design and/or technologies used will provide substantially equivalent or greater accessibility to, and usability of, the facility.

3. The official charged with the enforcement of the standards shall document the reasons for the application of the design and/or technologies and their effect on the historical significance or character-defining features. Such documentation shall be in accordance with Section 8-602.2, Item 2, and shall include the opinion and comments of state or local accessibility officials, and the opinion and comments of representative local groups of people with disabilities. Such documentation shall be retained in the permanent file of the enforcing agency. Copies of the required documentation should be available at the facility upon request.

Note: For commercial facilities and places of public accommodation (Title III entities).

Equivalent facilitation for an element of a building or property when applied as a waiver of an ADA accessibility requirement will not be entitled to the Federal Department of Justice certification of this code as rebuttable evidence of compliance for that element.

# CHAPTER 8-7 STRUCTURAL REGULATIONS

# SECTION 8-701 PURPOSE. INTENT AND SCOPE

- **8-701.1 Purpose.** The purpose of the CHBC is to provide alternative regulations for the structural safety of buildings designated as qualified historical buildings or properties. The CHBC requires enforcing agencies to accept any reasonably equivalent alternatives to regular code when dealing with qualified historical buildings or properties.
- **8-701.2 Intent.** The intent of the CHBC is to encourage the preservation of qualified historical buildings or properties while providing a reasonable level of structural safety for occupants and the public at large through the application of the CHBC.
- **8-701.3 Application.** The alternative structural regulations provided by Section 8-705 are to be applied in conjunction with regular code whenever a structural upgrade or reconstruction is undertaken for qualified historical buildings or properties.

#### SECTION 8-702 GENERAL

- **8-702.1** The CHBC shall not be construed to allow the enforcing agency to approve or permit a lower level of safety of structural design and construction than that which is reasonably equivalent to the regular code provisions in occupancies which are critical to the safety and welfare of the public at large, including, but not limited to, public and private schools, hospitals, municipal police and fire stations and essential services facilities.
- **8-702.2** Nothing in these regulations shall prevent voluntary and partial seismic upgrades when it is demonstrated that such upgrades will improve life safety and when a full upgrade would not otherwise be required.

#### SECTION 8-703 STRUCTURAL SURVEY

- **8-703.1 Scope.** When a structure, or portion of a structure is to be evaluated for structural capacity under the CHBC, it shall be surveyed for structural conditions by an architect or engineer knowledgeable in historical structures. The survey shall evaluate deterioration or signs of distress. The survey shall determine the details of the structural framing and the system for resistance of gravity and lateral loads. Details, reinforcement and anchorage of structural systems and veneers shall be determined and documented where these members are relied on for seismic resistance.
- **8-703.2** The results of the survey shall be utilized for evaluating the structural capacity and for designing modifications to the structural system to reach compliance with this code.
- **8-703.3 Historical records.** Past qualified historical records of the structure or similar structures may be used in the evaluation, including the effects of subsequent alterations.

# SECTION 8-704 NONHISTORICAL ADDITIONS AND NONHISTORICAL ALTERATIONS

- **8-704.1** New nonhistorical additions and nonhistorical alterations which are structurally separated from an existing historical structure shall comply with regular code requirements.
- **8-704.2** New nonhistorical additions which impose vertical or lateral loads on an existing structure shall not be permitted unless the affected part of the supporting structure is evaluated and strengthened, if necessary, to meet regular code requirements.

Note: For use of archaic materials, see Chapter 8-8.

#### SECTION 8-705 STRUCTURAL REGULATIONS

- **8-705.1 Gravity loads.** The capacity of the structure to resist gravity loads shall be evaluated and the structure strengthened as necessary. The evaluation shall include all parts of the load path. Where no distress is evident, and a complete load path is present, the structure may be assumed adequate by having withstood the test of time if anticipated dead and live loads will not exceed those historically present.
- **8-705.2 Wind and seismic loads.** The ability of the structure to resist wind and seismic loads shall be evaluated. The evaluation shall be based on the requirements of Section 8-706.
- **8-705.2.1** Any unsafe conditions in the lateral-load-resisting system shall be corrected, or alternative resistance shall be provided. Additional resistance shall be provided to meet the minimum requirements of this code.
- **8-705.2.2** The architect or engineer shall consider additional measures with minimal loss of, and impact to historical materials which will reduce damage and needed repairs in future earthquakes to better preserve the historical structure in perpetuity. These additional measures shall be presented to the owner for consideration as part of the rehabilitation or restoration.

# SECTION 8-706 LATERAL LOAD REGULATIONS

**8-706.1 Lateral loads.** The forces used to evaluate the structure for resistance to wind and seismic loads need not exceed 0.75 times the seismic forces prescribed by the 1995 Edition of the *California Building Code* (CBC). The seismic forces may be computed based on the Rw values tabulated in the regular code for similar lateral-force-resisting-systems. All deviations of the detailing provisions of the lateral-force-resisting systems shall be evaluated for stability and the ability to maintain load-carrying capacity at increased lateral loads.

Unreinforced masonry bearing wall buildings shall comply with Appendix Chapter 1 of the *Uniform Code for Building Conservation*<sup>TM</sup> (UCBC<sup>TM</sup>), 1994 edition, and as modified by this code. Reasonably equivalent standards may be used on a case-by-case basis when approved by the authority having jurisdiction.

- **8-706.2 Existing building performance.** The seismic resistance may be based upon the ultimate capacity of the structure to perform giving due consideration to ductility and reserve strength of the lateral-force resisting-system and materials while maintaining a reasonable factor of safety. Broad judgment may be exercised regarding the strength and performance of materials not recognized by regular code requirements. (See Chapter 8-8, Archaic Materials and Methods of Construction.)
  - **8-706.2.1** All structural materials or members that do not comply with detailing and proportioning requirements of the regular code shall be evaluated for potential seismic performance and the consequence of noncompliance. All members which might fail and lead to possible collapse, or threaten life-safety, when subjected to seismic demands in excess of those prescribed in Section 8-706.1, shall be judged unacceptable and appropriate structural strengthening shall be developed. Anchorages for veneers and decorative ornamentation shall be included in this evaluation.
- **8-706.3 Load path.** A complete and continuous load path, including connections, from every part or portion of the structure to the ground shall be provided for the required forces. It shall be verified that the structure is adequately tied together to perform as a unit when subjected to earthquake forces.
- **8-706.4 Parapets.** Parapets and exterior decoration shall be investigated for conformance with regular code requirements for anchorage and ability to resist prescribed seismic forces.

An exception to regular code requirements shall be permitted for those parapets and decorations which are judged not to be a hazard to life safety.

**8-706.5 Nonstructural features.** Nonstructural features of historical structure, such as exterior veneer, cornices and decorations, which might fall and create a life-safety hazard in an earthquake, shall be investigated. Their ability to resist seismic forces shall be verified, or the feature shall be strengthened.

**8-706.5.1** Partitions and ceilings of corridors and stairways serving an occupant load of 30 or more shall be investigated to determine their ability to remain in place when the building is subjected to earthquake forces.

# CHAPTER 8-8 ARCHAIC MATERIALS AND METHODS OF CONSTRUCTION

# SECTION 8-801 PURPOSE, INTENT AND SCOPE

- **8-801.1 Purpose.** The purpose of the CHBC is to provide regulations for the use of historical methods and materials of construction that are at variance with regular code requirements or are not otherwise codified, in buildings or structures designated as qualified historical buildings or properties. The CHBC requires enforcing agencies to accept any reasonably equivalent alternatives to regular code when dealing with qualified historical buildings or properties.
- **8-801.2 Intent.** It is the intent of the CHBC to provide for the use of historical methods and materials of construction that are at variance with specific code requirements or are not otherwise codified.
- **8-801.3 Scope.** Any construction type or material that is, or was, part of the historical fabric of a structure, is covered by this chapter. Archaic materials and methods of construction present in a historical structure may remain or be reinstalled or be installed with new materials of the same class to match existing conditions.

## SECTION 8-802 GENERAL ENGINEERING APPROACHES

Allowable stresses or ultimate strengths for archaic materials shall be assigned based upon similar conventional codified materials, or on tests as hereinafter indicated. The archaic materials and methods of construction shall be thoroughly investigated for their details of construction in accordance with Section 8-703. Testing shall be performed when applicable to evaluate existing conditions. The architect or structural engineer in responsible charge of the project shall assign allowable stresses or ultimate strength values to archaic materials. Such assigned allowable stresses, or ultimate strength values, shall not be greater than those provided for in the following sections without adequate testing, and shall be subject to the concurrence of the enforcing agency.

# SECTION 8-803 NON-STRUCTURAL ARCHAIC MATERIALS

Where non-structural historical materials exist in uses which do not meet the requirements of the regular code, their continued use is allowed by this code, provided that any public health and life-safety hazards are mitigated subject to the concurrence of the enforcing agency.

# SECTION 8-804 ALLOWABLE CONDITIONS FOR SPECIFIC MATERIALS

Archaic materials which exist and are to remain in historical structures shall be evaluated for their condition and for loads required by this code. The structural survey required in Section 8-703 of this code shall document existing conditions, reinforcement, anchorage, deterioration and other factors pertinent to establishing allowable stresses and adequacy of the archaic materials. The remaining portion of this chapter provides additional specific requirements for commonly encountered archaic materials.

#### SECTION 8-805 MASONRY

For adobe, see Section 8-806.

**8-805.1 Existing solid masonry.** Existing solid masonry walls of any type, except adobe, may be allowed, without testing, a maximum value of nine pounds per square inch (62.1 kPa) in shear where there is a qualifying statement by the architect or engineer that an inspection has been made, that mortar joints are filled and that both brick and mortar are reasonably good. The allowable shear stress above applies to unreinforced masonry, except adobe, where the maximum ratio of unsupported height or length to thickness does not exceed 12, and where minimum quality mortar is used or exists. Wall height or length is measured to supporting or resisting elements that are at least twice as stiff as the tributary wall. Stiffness is based on the gross section. Allowable shear stress may be increased by the addition of 10 percent of the axial direct stress due to the weight of the wall directly above. Higher quality mortar may provide a greater shear value and shall be tested in accordance with UBC Standard 21-6.

#### 8-805.2 Stone masonry.

- **8-805.2.1 Solid-backed stone masonry.** Stone masonry solidly backed with brick masonry shall be treated as solid brick masonry as described in Section 8-805.1 and in the UCBC, provided representative testing and inspection verifies solid collar joints between stone and brick and that a reasonable number of stones lap with the brick wythes as headers or that steel anchors are present. Solid stone masonry where the wythes of stone effectively overlap to provide the equivalent header courses may also be treated as solid brick masonry.
- **8-805.2.2 Independent wythe stone masonry.** Stone masonry with independent face withes may be treated as solid brick masonry as described in Section 805.1 and the UCBC, provided representative testing and inspection verify that the core is essentially solid in the masonry wall and that steel ties are epoxied in drilled holes between outer stone wythes at floors, roof and at not-to-exceed 4 feet (1219 mm) on center in each direction, between floors and roof.
- **8-805.2.3 Testing of stone masonry.** Testing of stone masonry shall be similar to UBC Standard 21-6, except that representative stones which are not interlocked shall be pulled outward from the wall and shear area appropriately calculated after the test.
- **8-805.3 Reconstructed walls.** Totally reconstructed walls utilizing original brick or masonry, constructed similar to original, shall be constructed in accordance with regular code. Repairs or infills may be constructed in a similar manner to the original walls without conforming to regular code.

#### SECTION 8-806 ADOBE

- **8-806.1 General.** Unburned clay masonry may be constructed, reconstructed, stabilized, or rehabilitated subject to this chapter. Alternate approaches which provide an equivalent or greater level of safety may be used, subject to the concurrence of the enforcing agency.
- **8-806.2 Protection.** Provisions shall be made to protect adobe structures from moisture and deterioration. The unreinforced adobe shall be maintained in reasonably good condition. Particular attention shall be given to moisture content of adobe walls. Unmaintained or unstabilized walls or ruins shall be evaluated for safety based on their condition and stability. Additional safety measures may be required subject to the concurrence of the enforcing agency.
- **8-806.3 Requirements.** Unreinforced new or existing adobe walls shall meet the requirements. Existing sod or rammed earth walls shall be considered similar to the extent these provisions apply. Where existing dimensions do not meet these conditions, additional strengthening measures may be required.
  - 1. One-story adobe load-bearing walls shall not exceed a height-to-thickness ratio of 6.

- 2. Two-story adobe buildings or structures' height-to-thickness wall ratio shall not exceed 5 at the ground floor and 6 at the second floor, and shall be measured at floor-to-floor height when the second floor and attic ceiling/roof are connected to the wall as described below.
- 3. Non-load-bearing adobe partitions and gable end walls shall be evaluated for stability and anchored against out-of-plane failure.
- 4. A bond beam or equivalent structural element shall be provided at the top of all adobe walls, and for twostory buildings at the second floor. The size and configuration of the bond beam shall be designed in each case to meet the requirements of the existing conditions and provide an effective brace for the wall, to tie the building together and connect the wall to the floor or roof.
- **8-806.4 Repair or reconstruction.** Repair or reconstruction of wall area may utilize un-stabilized brick or adobe masonry designed to be compatible with the constituents of the existing adobe materials.
- **8-806.5 Shear values.** Existing adobe may be allowed a maximum value of four pounds per square inch (27.6 kPa) for shear, with no increase for lateral forces.
- **8-806.6 Mortar.** Mortar may be of the same soil composition as that used in the existing wall, or in new walls as necessary to be compatible with the adobe brick.

#### SECTION 8-807 WOOD

- **8-807.1 Existing wood diaphragms or walls.** Existing wood diaphragms or walls of straight or diagonal sheathing shall be assigned shear resistance values appropriate with the fasteners and materials functioning in conjunction with the sheathing. The structural survey shall determine fastener details and spacings and verify a load path through floor construction. Shear values of Tables 8-8-A and 8-8-B.
- **8-807.2 Wood lath and plaster.** Wood lath and plaster walls and ceilings may be utilized using the shear values referenced in Section 8-807.1.
- **8-807.3 Existing wood framing.** Existing wood framing members may be assigned allowable stresses consistent with codes in effect at the time of construction. Existing or new replacement wood framing may be of archaic types originally used if properly researched, such as balloon and single wall. Wood joints such as dovetail and mortise and tenon types may be used structurally, provided they are well made. Lumber selected for use and type need not bear grade marks, and greater or lesser species such as low-level pine and fir, boxwood and indigenous hardwoods and other variations may be used for specific conditions where they were or would have been used.

Wood fasteners such as square or cut nails may be used with a maximum increase of 50 percent over wire nails for shear.

#### SECTION 8-808 CONCRETE

- **8-808.1 Materials.** Natural cement concrete, unreinforced rubble concrete, and similar materials may be utilized wherever that material is used historically. Concrete of low strength and with less reinforcement than required by the regular code may remain in place. The architect or engineer shall assign appropriate values of strength based on testing of samples of the materials. Bond and development lengths shall be determined based on historical information or tests.
- **8-808.2 Detailing.** The architect or engineer shall carefully evaluate all detailing provisions of the regular code which are not met and shall consider the implications of these variations on the ultimate performance of the structure, giving due consideration to ductility and reserve strength.

#### SECTION 8-809 STEEL AND IRON

The hand-built, untested use of wrought or black iron, the use of cast iron or grey iron, and the myriad of joining methods that are not specifically allowed by code may be used wherever applicable and wherever they have proven their worth under the considerable span of years involved with most qualified historical structures. Uplift capacity should be evaluated and strengthened where necessary. Fixed conditions or mid-height lateral loads on cast iron columns that could cause failure should be taken into account. Existing structural wrought, forged steel or grey iron may be assigned the maximum working stress prevalent at the time of original construction.

#### SECTION 8-810 HOLLOW CLAY TILE

The historical performance of hollow clay tile in past earthquakes shall be carefully considered in evaluating walls of hollow clay tile construction. Hollow clay tile bearing walls shall be evaluated and strengthened as appropriate for lateral loads and their ability to maintain support of gravity loads. Suitable protective measures shall be provided to prevent blockage of exit stairways, stairway enclosures, exit ways and public ways as a result of an earthquake.

#### SECTION 8-811 VENEERS

**8-811.1 Terra cotta and stone.** Terra cotta, cast stone and natural stone veneers shall be investigated for the presence of suitable anchorage. Steel anchors shall be investigated for deterioration or corrosion. New or supplemental anchorage shall be provided as appropriate.

**8-811.2** Anchorage. Brick veneer with mechanical anchorage at spacings greater than required by regular code may remain provided the anchorages have not corroded. Nail strength in withdrawal in wood sheathing may be utilized to its capacity in accordance with code values.

#### SECTION 8-812 GLASS AND GLAZING

**8-812.1 Glazing subject to human impact.** Historical glazing material located in areas subject to human impact may be approved subject to the concurrence of the enforcing agency when alternative protective measures are provided. These measures may include, but not be limited to, additional glazing panels, protective film, protective guards or systems, and devices or signs which would provide adequate public safety.

**8-812.2 Glazing in fire-rated systems.** See Section 8-402.3.

# CHAPTER 8-9 MECHANICAL, PLUMBING AND ELECTRICAL REQUIREMENTS

#### SECTION 8-901 PURPOSE, INTENT AND SCOPE

- **8-901.1 Purpose.** The purpose of the CHBC is to provide regulations for the mechanical, plumbing and electrical systems of buildings designated as qualified historical buildings or properties. The CHBC requires enforcing agencies to accept any reasonable equivalent solutions to regular code when dealing with qualified historical buildings or properties.
- **8-901.2 Intent.** The intent of the CHBC is to preserve the integrity of qualified historical buildings or properties while providing a reasonable level of protection from fire, health, and life-safety hazards (hereinafter referred to as safety hazards) for the building occupants.
- **8-901.3 Scope.** The CHBC shall be applied in conjunction with the regular code whenever compliance with the regular code is required for qualified historical buildings or properties.
- **8-901.4 Safety hazard.** No person shall permit any safety hazard to exist on premises under their control, or fail to take immediate action to abate such hazard. Existing systems which constitute a safety hazard when operational may remain in place provided they are completely and permanently rendered inoperative. Safety hazards created by inoperative systems shall not be permitted to exist. Requirements of the regular code concerning general regulations shall be complied with, except that the enforcing agency shall accept solutions which do not cause a safety hazard.
- **8-901.5 Energy conservation.** Qualified historical buildings or properties covered by this part are exempted from compliance with energy conservation standards. When new nonhistorical lighting and space conditioning system components, devices, appliances and equipment are installed, they shall comply with the requirements of Title 24 Part 6, *The California Energy Code*, except where the historical significance or character-defining features are threatened.

#### SECTION 8-902 MECHANICAL

- 8-902.1 General. Mechanical systems shall comply with the regular code unless otherwise modified by this chapter.
  - **8-902.1.1** The provisions of the CHBC shall apply to the acceptance, location, installation, alteration, repair, relocation, replacement or addition of any heating, ventilating, air conditioning, domestic incinerators, kilns or miscellaneous heat-producing appliances or equipment within or attached to a historical building.
  - **8-902.1.2** Existing systems which do not, in the opinion of the enforcing agency, constitute a safety hazard may remain in use.
  - **8-902.1.3** The enforcing agency may approve any alternative to the CHBC which would achieve equivalent life safety.
- **8-902.2 Heating facilities.** All dwelling-type occupancies covered under this chapter shall be provided with heating facilities. Wood-burning or pellet stoves or fireplaces may be acceptable as heating facilities.
- **8-902.3 Fuel oil piping and tanks.** Fuel oil piping and tanks shall comply with regular code requirements except that the enforcing agency may waive such requirements where the lack of compliance does not create a safety or environmental hazard.
- **8-902.4 Heat-producing and cooling equipment.** Heat-producing and cooling equipment shall comply with regular code requirements, governing equipment safety, except that the enforcing agency may accept alternatives which do not create a safety hazard.

#### 8-902.5 Combustion air.

- **8-902.5.1** All fuel-burning appliances and equipment shall be provided a sufficient supply of air for proper fuel combustion, ventilation, and draft hood dilution.
- **8-902.5.2** The enforcing agency may require operational tests for combustion air systems which do not comply with applicable requirements of the regular code.

#### 8-902.6 Venting of appliances.

- **8-902.6.1** Every appliance required to be vented shall be connected to an approved venting system. Venting systems shall develop a positive flow adequate to convey all combustion products to the outside atmosphere.
- **8-902.6.2** Masonry chimneys in structurally sound condition may remain in use for all fuel-burning appliances provided the flue is evaluated and documentation provided that the masonry and grout are in good condition. Terra cotta chimneys and Type C metallic vents installed in concealed spaces shall not remain in use unless otherwise mitigated and approved on a case-by-case basis.
- **8-902.6.3** The enforcing agency may require operational tests for venting systems which do not comply with applicable requirements of the regular code.

#### 8-902.7 Ducts.

- **8-902.7.1** New ducts shall be constructed and installed in accordance with applicable requirements of the regular code.
- **8-902.7.2** Existing duct systems which do not comply with applicable requirements of the regular code and do not, in the opinion of the enforcing agency, constitute a safety or health hazard may remain in use.

#### 8-902.8 Ventilating systems.

- 8-902.8.1 Ventilating systems shall be installed so that no safety hazard is created.
- **8-902.8.2** Grease hoods and grease hood exhaust systems shall be furnished and installed in accordance with applicable requirements of the regular code. Existing systems which are altered shall comply with the regular code.

#### 8-902.9 Miscellaneous equipment requirements.

- **8-902.9.1** The following appliances and equipment shall be installed so that no safety hazard is created: warm air furnaces, space heating equipment, vented decorative appliances, floor furnaces, vented wall furnaces, unit heaters, room heaters, absorption units, refrigeration equipment, duct furnaces, infrared radiant heaters, domestic incinerators, miscellaneous heat-producing appliances and water heaters.
- **8-902.9.2** Storage-type water heaters shall be equipped with a temperature-and pressure-relief valve in accordance with applicable requirements of the regular code.

#### SECTION 8-903 PLUMBING

- 8-903.1 General. Plumbing systems shall comply with the regular code unless otherwise noted.
  - **8-903.1.1** The provisions of the CHBC shall apply to the acceptance, location, installation, alteration, repair, relocation, replacement or addition of any plumbing system or equipment within or attached to a historical building.

- **8-903.1.2** Existing systems which do not, in the opinion of the enforcing agency, constitute a safety hazard may remain in use.
- **8-903.1.3** The enforcing agency may approve any alternative to these regulations which achieves equivalent life safety.

#### 8-903.2 Residential occupancies.

- **8-903.2.1** Where toilet facilities are provided, alternative sewage disposal methods may be acceptable if approved by the local health department. In hotels, where private facilities are not provided, water closets at the ratio of one for each 15 rooms may be acceptable.
- **8-903.2.2** Toilet facilities are not required to be on the same floor or in the same building as sleeping rooms. Water-flush toilets may be located in a building immediately adjacent to the sleeping rooms. When alternative Sewage disposal methods are utilized, they shall be located a minimum distance from the sleeping rooms or other locations as approved by the local health department.
- **8-903.2.3** Kitchen sinks shall be provided in all kitchens. The sink and counter top may be of any smooth non-absorbent finish which can be maintained in a sanitary condition.
- **8-903.2.4** Hand washing facilities shall be provided for each dwelling unit and each hotel guest room. A basin and pitcher may be acceptable as adequate hand washing facilities.
- **8-903.2.5** Hot or cold running water is not required for each plumbing fixture, provided a sufficient amount of water is supplied to permit the fixture's normal operation.
- **8-903.2.6** Bathtubs and lavatories with filler spouts less than 1-inch (25.4mm) above the fixture rim may remain in use provided there is an acceptable overflow below the rim.
- **8-903.2.7** Original or salvage water closets, urinals and flushometer valves shall be permitted in qualified historical buildings or properties. Historically accurate reproduction, nonlow-consumption water closets, urinals, and flushometer valves, shall be permitted except where historically accurate fixtures that comply with the regular code are available.
- **8-903.3 Materials.** New nonhistorical materials shall comply with the regular code requirements. The enforcing agency shall accept alternative materials which do not create a safety hazard where their use is necessary to maintain the historical integrity of the building.
- **8-903.4 Drainage and vent systems.** Plumbing fixtures shall be connected to an adequate drainage and vent system. The enforcing agency may require operational tests for drainage and vent systems which do not comply with applicable requirements of the regular code. Vent terminations may be installed in any location which, in the opinion of the enforcing agency, does not create a safety hazard.
- **8-903.5 Indirect and special wastes.** Indirect and special waste systems shall be installed so that no safety hazard is created. Chemical or industrial liquid wastes which may detrimentally affect the sanitary sewer system shall be pretreated to render them safe prior to discharge.
- **8-903.6 Traps and interceptors.** Traps and interceptors shall comply with the regular code requirements except that the enforcing agency shall accept solutions which do not increase the safety hazard. Properly maintained "S" and drum traps may remain in use.

#### 8-903.7 Joints and connections.

- **8-903.7.1** Joints and connections in new plumbing systems shall comply with applicable requirements of the regular code.
- **8-903.7.2** Joints and connections in existing or restored systems may be of any type that does not create a safety hazard.
- **8-903.8 Water distribution.** Plumbing fixtures shall be connected to an adequate water distribution system. The enforcing agency may require operational tests for water distribution systems which do not comply with applicable requirements of regular code. Prohibited (unlawful) connections and cross connections shall not be permitted.
- **8-903.9 Building sewers and private sewage disposal systems.** New building sewers and new private sewage disposal systems shall comply with applicable requirements of the regular code.
- **8-903.10 Fuel-gas piping.** Fuel-gas piping shall comply with the regular code requirements except that the enforcing agency shall accept solutions which do not increase the safety hazard.

# **SECTION 904 ELECTRICAL**

- **8-904.1 General.** Electrical systems shall comply with the regular code unless otherwise permitted by this code, or approved by the authority having jurisdiction.
  - **8-904.1.1** The provisions of the CHBC shall apply to the acceptance, location, installation, alteration, repair, relocation, replacement or addition of any electrical system or portion thereof, the premise wiring, or equipment fixed in place as related to restoration within or attached to a qualified historical building or property.
  - **8-904.1.2** Existing systems, wiring methods and electrical equipment which do not, in the opinion of the enforcing agency, constitute a safety hazard may remain in use.
  - 8-904.1.3 The enforcing agency may approve any alternative to the CHBC which achieves equivalent safety.
  - **8-904.1.4** Archaic methods that do not appear in present codes may remain and may be extended if, in the opinion of the enforcing agency, they constitute a safe installation.

#### 8-904.2 Wiring methods.

- **8-904.2.1** Where existing branch circuits do not include an equipment grounding conductor and, in the opinion of the enforcing agency, it is impracticable to connect an equipment grounding conductor to the grounding electrode system, receptacle convenience outlets may remain the nongrounding type.
- **8-904.2.2** Ground fault circuit interrupter (GFCI) protected receptacles shall be installed where replacements are made at receptacle outlets that are required to be so protected by the regular code in affect at the time of replacement. Metallic face plates shall either be grounded to the grounded metal outlet box or be grounded to the grounding-type device when used with devices supplied by branch circuits without equipment grounding conductors.
- **8-904.2.3** Grounding-type receptacles shall not be used without a grounding means in an existing receptacle outlet unless GFCI protected. Existing nongrounding receptacles shall be permitted to be replaced with nongrounding or grounding-type receptacles where supplied through a ground fault circuit interrupter.

- **8-904.2.4** Extensions of existing branch circuits without equipment grounding conductors shall be permitted to supply grounding-type devices only when the equipment grounding conductor of the new extension is grounded to any accessible point on the grounding electrode system.
- **8-904.2.5** Receptacle outlet spacing and other related distance requirements shall be waived or modified if determined to be impractical by the enforcing agency.
- **8-904.2.6** For the replacement of lighting fixtures on an existing non-grounded lighting outlet, or when extending an existing non-grounding lighting outlet, the following shall apply:
  - 1. The exposed conductive parts of lighting fixtures shall be connected to any acceptable point on the grounding electrode system, or
  - 2. The lighting fixtures shall be made of insulating material and shall have no exposed conductive parts.

**Exception:** Lighting fixtures mounted on electrically non-conductive ceilings or walls where located not less than either 8 feet (2438mm) vertically or five 5 feet (1524mm) horizontally from grounded surfaces.

- **8-904.2.7** Lighting load calculations for services and feeders may be based on actual loads as installed in lieu of the "watts per square foot" method.
- **8-904.2.8** Determination of existing loads may be based on maximum demand recordings in lieu of calculations provided all of the following are met:
  - 1. Recordings are provided by the serving agency.
  - 2. The maximum demand data is available for a one-year period.

**Exception:** If maximum demand data for one-year period is not available, the maximum demand date shall be permitted to be based on the actual amperes continuously recorded over a minimum 30-day period by a recording ammeter connected to the highest loaded phase of the feeder or service. The recording should reflect the maximum demand when the building or space is occupied and include the measured or calculated load at the peak time of the year, including the larger of the heating or cooling equipment load.

- 3. There has been no change in occupancy of character of load during the previous 12 months.
- 4. The anticipated load will not change, or the existing demand load at 125 percent plus the new load does not exceed the ampacity of the feeder or rating of the service.

# CHAPTER 8-10 QUALIFIED HISTORICAL DISTRICTS, SITES AND OPEN SPACES

#### SECTION 1001 PURPOSE AND SCOPE

- **8-1001.1. Purpose**. The purpose of this chapter is to provide regulations for the preservation, rehabilitation, restoration and reconstruction of associated qualified historical features of qualified historical buildings, properties or districts (as defined in Chapter 8-2), and for which Chapters 8-3 through 8-9 of the CHBC may not apply.
- **8-1001.2.** Scope. This Chapter applies to the associated qualified historical features of qualified historical buildings or properties and such as historic districts that are beyond the buildings themselves which include, but are not limited to natural features and designed site and landscape plans with natural and man-made landscape elements that support their function and aesthetics. This may include, but will not be limited to:
  - 1. Site plan layout configurations and relationships (pedestrian, equestrian and vehicular site circulation, topographical grades and drainage, and use areas).
  - 2. Landscape elements (plant materials, site properties, structures other than the qualified historical buildings, bridges and their associated properties, structures, lighting, water features, art ornamentation, and pedestrian, equestrian and vehicular surfaces).
  - 3. Functional elements (utility placement, erosion control and environmental mitigation measures)

#### SECTION 8-1002 APPLICATION

- **8-1002.1** The CHBC shall apply to all sites and districts and their features associated with qualified historical buildings or qualified historical districts as outlined in 8-1001.2 Scope.
- **8-1002.2** Where the application of regular code may impact the associated features of qualified historical properties beyond their footprints, by work performed secondarily, those impacts shall also be covered by the CHBC.
- **8-1002.3** This Chapter shall be applied for all issues regarding code compliance or other standard or regulation as they affect the purpose of this Chapter.
- **8-1002.4** The application of any code or building standard shall not un-duly restrict the use of a qualified historical building or property that is otherwise permitted pursuant to Chapter 8-3 and the intent of the *State Historical Building Code*, Section 18956.

#### SECTION 8-1003 SITE RELATIONSHIPS

The relationship between a building or property structure and its site, or the associated features of a district (including qualified historical landscape), site, objects and their features are critical components that may be one of the criteria for these buildings and properties to be qualified under the CHBC. The CHBC recognizes the importance of these relationships. This Chapter shall be used to provide context sensitive solutions for treatment of qualified historical buildings, properties, district or their associated qualified historical features, or when work to be performed secondarily impacts the associated qualified historical features of a qualified historical building or property.

#### **APPENDIX A**

#### **CHAPTER 8-1**

When modification must be made to qualified historical buildings or properties, the CHBC is intended to work in conjunction with the United States Secretary of Interior Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings and the Secretary of Interior's Standards Guidelines for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.

#### **CHAPTER 8-6**

#### **TABLE 1 -- PROVISION APPLICABILITY**

	Title II Public Entities	Title III Private Entities	Title III Barrier Removal
SECTION 8-601 PURPOSE, INTENT, SCOPE	Applies	Applies	Applies
<b>8-601.1 Purpose.</b> The purpose of the CHBC is to provide alternative regulations to facilitate access and use by people with disabilities to and throughout facilities designated as qualified historical buildings or properties. These regulations require enforcing agencies to accept alternatives to regular code when dealing with qualified historical buildings or properties.			
<b>8-602.2 Intent</b> The intent of this chapter to preserve the integrity of qualified historical buildings and properties while providing access to and use by people with disabilities.			
<b>8-601.3 Scope.</b> The CHBC shall apply to every qualified historical building or property that is required to provide access to people with disabilities.			
Provisions of this chapter do not apply to new construction or reconstruction/replicas of historical buildings.			
<ol> <li>Where provisions of this chapter apply to alteration of qualified historical buildings or properties, alteration is defined in <i>California Building Code</i> (CBC), Chapter 2, Definitions and Abbreviations. 202 – A. Alter or Alteration.</li> </ol>			
<b>8-601.4 General application.</b> The provisions in the CHBC apply to local, state and federal governments (Title II entities); alteration of commercial facilities and places of public accommodation (Title III entities); and barrier removal in commercial facilities and places of public accommodation (Title III entities). Except as noted in this chapter.			
SECTION 8-602 — BASIC PROVISIONS	Applies	Applies	Applies
<b>8-602.1 Regular code.</b> The regular code for access for people with disabilities (Title 24, Part 2, Vol.1, Chapter 11B) shall be applied to qualified historical buildings or properties unless strict compliance with the regular code will threaten or destroy the historical significance or character-defining features of the building or property.			

TABLE 1 -- PROVISION APPLICABILITY -- continued

	TABLE 1 PROVISION APPLICABIL	Title II Public Entities	Title III Private Entities	Title III Barrier Removal
features	Alternative provisions. If the historical significance or character-defining are threatened, alternative provisions for access may be applied to this chapter provided the following conditions are met:			
1.	These provisions shall be applied only on an item-by-item or case-by-case basis.			
2.	Documentation is provided, including meeting minutes or letters, stating the reasons for the application of the alternative provisions. Such documentation shall be retained in the permanent file of the enforcing agency.			
	SECTION 8-603 — ALTERNATIVES	Applies	Applies	Applies
alteration 4.1.7(3)	Alternative minimum standards. The alternative minimum standards for ns of qualified historical buildings or facilities are contained in Section of ADA Standards for Accessible Design, as incorporated and set forth in egulation 28 C.F.R Pt. 36.			
	Entry. These alternatives do not allow exceptions for the requirement of dings in front of doors, except as provided in Section 8-603.4.	Applies	Applies	Applies
1.	Access to any entrance used by the general public and no further than 200 feet (60 960 mm) from the primary entrance.			
2.	Access at any entrance not used by general public but open and unlocked with directional signs at the primary entrance and as close as possible to, but no further than 200 feet (60 960 mm) from, the primary entrance.			
3.	The accessible entrance shall have a notification system. Where security is a problem, remote monitoring may be used.			
8.603.3	Doors. Alternatives listed in order of priority are:	Does not apply	Does not apply	Applies
1.	Single-leaf door which provides a minimum 30 inches (762 mm) of clear opening.			
2.	Single-leaf door which provides a minimum 29½ inches (749mm) clear opening			
3.	Double door, one leaf of which provides a minimum $29\%$ inches (749mm) clear opening.			
4.	Double doors operable with a power-assist device to provide a minimum $29\frac{1}{2}$ inches (749mm) clear opening when both doors are in the open position.			
consider	<b>Power-assisted doors.</b> Power-assisted door or doors may be ed an equivalent alternative to level landings, strikeside clearance and ening forces required by regular code.	Applies	Applies	Applies
	<b>Toilet rooms.</b> In lieu of separate-gender toilet facilities as required in the code, an accessible unisex toilet may be designated.	Applies	Applies	Applies

#### TABLE 1 -- PROVISION APPLICABILITY -- continued

	TABLE 1 PROVISION APPLICABIL	Title II Public Entities	Title III Private Entities	Title III Barrier Removal
8-603.6 E	Exterior and interior ramps and lifts. Alternatives listed in order of re:	Applies	Applies	Applies
1.	A lift or a ramp of greater than standard slope but no greater than 1:10, for horizontal distances not to exceed $\underline{5}$ feet (1525 mm). Signs shall be posted at upper and lower levels to indicate steepness of the slope.			
2.	Access by ramps of 1:6 slope for horizontal distance not to exceed 13 inches (330 mm). Signs shall be posted at upper and lower levels to indicate steepness of the slope.			
and scop	SECTION 8-604 — EQUIVALENT FACILITATION other designs and technologies, or deviation from particular technical bing requirements, are permitted if the application of the alternative s contained in Section 8-603 would threaten or destroy the qualified significance or character-defining features of the historical building or		Waivers If a builder applies for a waiver of an ADA accessibility requirement for an element of a	Applies
1.	Such alternatives shall be applied only on an item-by-item or case-by-case basis.		building, he or she will not be entitled to	
2.	Access provided by experiences, services, functions, materials and resources through methods including, but not limited to, maps, plans, videos, virtual reality, and related equipment, at accessible levels. The alternative design and/or technologies used will provide substantially equivalent or greater accessibility to, and usability of, the facility.		certification's rebuttable evidence of compliance for that element. This limitation on the	
3.	The official charged with the enforcement of the standards shall document the reasons for the application of the design and/or technologies and their effect on the historical significance or character-defining features. Such documentation shall be in accordance with Section 8-602.2, Item 2, and shall include the opinion and comments of state or local accessibility officials, and the opinion and comments of representative local groups of people with disabilities. Such documentation shall be retained in the permanent file of the enforcing agency. Copies of the required documentation should be available at the facility upon request.		certification of the certification determination should be noted in any publication of Chapter 8-6 if certification is granted.	
	<b>Note:</b> For commercial facilities and places of public accommodation (Title III entities).			
	Equivalent facilitation for an element of a building or property when applied as a waiver of an ADA accessibility requirement will not be entitled to the Federal Department of Justice certification of this code as rebuttable evidence of compliance for that element.			

Notes: The regular code for Chapter 8-6 is contained in Title 24, Part 2, Vol.1, Chapter 11, which contain standards for new construction. Provisions of this chapter may be used in conjunction with all other provisions of the regular code and ADA regulations.

#### **HISTORY NOTE APPENDIX**

### California Historical Building Code California Code of Regulations, Title 24, Part 8

For prior history, see History Note Appendix to the *California Historical Building Code*, 2001 Triennial Edition, effective November 1, 2002.

1. The 2007 Triennial Edition of the *California Historical Building Code* was approved by the California Building Standards Commission on January 29, 2007. The California Building Standards Commission established January 1, 2008, as the effective date.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

### 2007 California Fire Code Title 24 (T-24), Part 9 (Pt), California Code of Regulations (CCR)

# CALIFORNIA FIRE CODE-MATRIX ADOPTION TABLE CALIFORNIA CHAPTER 1 GENERAL CODE PROVISIONS

Adopting Agency		B S C	S F M		HCI	D	DS	SA		OSI	HPE	)	C S A	D H S	A G R	D W R	CEC	C A	S L	S L C
Adopt Entire Chapter				1	2	1/AC	AC	SS	1	2	3	4								
Adopt entire California sections listed below)	ot entire California as amended (amended ons listed below)																			
Adopt only those section	ons listed below) or only those sections that are listed below						Х													
Article / Section	Codes																			
109 and 109.1	CA						Х													

## [DSA-AC] SECTION 109 DIVISION OF THE STATE ARCHITECT

#### 109.1 Division of the State Architect — Access Compliance.

**General.** The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other improvements to which this code applies in compliance with state law to ensure that these improvements are accessible to and usable by persons with disabilities. Additions, alterations and structural repairs in all buildings and facilities shall comply with these provisions for new buildings, except as otherwise provided and specified herein.

The provisions of these regulations shall apply to any portable buildings leased or owned by a school district, and shall also apply to temporary and emergency buildings and facilities.

In addition, to incorporate standards at least as restrictive as those required by the federal government for barrier-free design under (1) Title III (Public Accommodations and Commercial Facilities), Subpart D (New Construction and Alteration) and Appendix A (Americans with Disabilities Act Standards for Accessible Design) (see 28 C.F.R., Part 36), and (2) Title II (Public Entities), Section 35.151 (New Construction and Alterations) (see 28 C.F.R., Part 35) both from the Americans with Disabilities Act of 1990, and (3) under the Fair Housing Amendments of 1988. Some of these regulations may be more stringent than state law in order to meet the federal requirement.

- **109.1.1. Application.** See Government Code commencing with Section 4450. Publicly funded buildings, structures, sidewalks, curbs and related facilities shall be accessible to and usable by persons with disabilities as follows:
  - **109.1.1.1** All buildings, structures, sidewalks, curbs and related facilities constructed in the state by the use of state, county or municipal funds, or the funds of any political subdivision of the state.
  - **109.1.1.2** All buildings, structures and facilities that are leased, rented, contracted, sublet or hired by any municipal county, or state division of government, or by a special district.
  - **109.1.1.3** All publicly funded buildings used for congregate residences or for one- or two-family dwelling unit purposes shall conform to the provisions applicable to living accommodations.

- **109.1.1.4** All existing publicly funded buildings and facilities when alterations, structural repairs or additions are made to such buildings or facilities. For detailed requirements on existing buildings, see Chapter 11B, Division IV.
- **109.1.1.5** With respect to buildings, structures, sidewalks, curbs and related facilities not requiring a building permit, building standards published in the California Building Standards Code relating to access for persons with disabilities and other regulations adopted pursuant to Government Code Section 4450, and in effect at the time construction is commenced, shall be applicable.
- **109.1.2. Application.** See Health and Safety Code commencing with Section 19952. All privately funded public accommodations, as defined, and commercial facilities, as defined, shall be accessible to persons with physical disabilities as follows:

**Exception:** Certain types of privately funded multistory buildings do not require installation of an elevator to provide access above and below the first floor. See Chapter 11B.

- **109.1.2.1** Any building, structure, facility, complex, or improved area, or portions thereof, which are used by the general public.
- **109.1.2.2** Any sanitary facilities which are made available for the public, clients or employees in such accommodations or facilities.
- **109.1.2.3** Any curb or sidewalk intended for public use that is constructed in this state with private funds.
- **109.1.2.4** All existing privately funded public accommodations when alterations, structural repairs or additions are made to such public accommodations as set forth under Chapter 11B.
- **109.1.3. Application Public Housing and Private Housing Available for Public Use.** See Government Code Sections 4450 and 12955.1 (d).

#### 109.1.4. Enforcing Agency.

- **109.1.4.1** The director of General Services where state funds are utilized for any project or where funds of counties, municipalities or other political subdivisions are utilized for the construction of elementary, secondary or community college projects.
- **109.1.4.2** The governing bodies where funds of counties, municipalities or other political subdivisions are utilized except as otherwise provided above.
- **109.1.4.3** The building department of every city, county, or city and county within the territorial area of its city, county, or city and county, where private funds are utilized. "Building department" means the department, bureau or officer charged with the enforcement of laws or ordinances regulating the erection or construction, or both the erection and construction, of buildings.
- **109.1.5.** Special Conditions for Persons with Disabilities Requiring Appeals Action Ratification. Whenever reference is made in these regulations to this section, the findings and determinations required to be rendered by the local enforcing agency shall be subject to ratification through an appeals process.
- 109.1.6 Authority Cited. Government Code Section 4450.
- 109.1.7 Reference Cited. Government Code Sections 4450 through 4461, 12955.1(d) and Health and Safety Code Sections 18949.1, 19952 through 1995

# CALIFORNIA FIRE CODE-MATRIX ADOPTION TABLE CHAPTER 2 DEFINITIONS

Adopting Agency		B S C	S F M		HC	D	DS	SA		OSHF	D		C S A	D H S	A G R	D W R	CEC	C A	S L	S L C
Adopt Entire Chapter				1	2	1/A C	AC	SS	1	2	3	4								
Adopt entire California as amend sections listed below)	ed (amended																			
Adopt only those sections that are	e listed below						Х													
Article / Section	Codes																			
Accessible Means of Egress	IFC						Х													
Area of Refuge	IFC						Х													
Exit	IFC						Х													
Guard (or Guardrail)	IFC						Х													
Handrail	IFC						Х													
Public Way	IFC						Х													
Stair	IFC						Х													
Stairway	IFC						Х													

# SECTION 202 GENERAL DEFINITIONS

- [B] ACCESSIBLE MEANS OF EGRESS. See Section 1002.1.
- [B] AREA OF REFUGE. See Section 1002.1.
- [B] EXIT. See Section 1002.1.
- [B] GUARD [DSA-AC] (or GUARDRAIL). See Section 1002.1.
- [B] HANDRAIL. See Section 1002.1.
- [B] PUBLIC WAY. See Section 1002.1.
- [B] STAIR. See Section 1002.1.
- [B] STAIRWAY. See Section 1002.1.

# CALIFORNIA FIRE CODE-MATRIX ADOPTION TABLE CHAPTER 3 GENERAL PRECAUTIONS AGAINST FIRE

Adopting Agency		B S C	S F M		HCI	D		SA		OSH	PD		C S A	Н	A G R	D W R	CA	_	SLC
Adopt Entire Chapter				1	2	1/A C	AC	SS	1	2	3	4							
Adopt entire California as amend sections listed below)	ed (amended																		
Adopt only those sections that ar	e listed below						Х												
Article / Section	Codes																		
312 with 312.1, 312.2 & 312.3	IFC						Х												

## SECTION 312 VEHICLE IMPACT PROTECTION

**312.1 General.** Vehicle impact protection required by this code shall be provided by posts that comply with Section 312.2 or by other approved physical barriers that comply with Section 312.3.

**312.2 Posts.** Guard posts shall comply with all of the following requirements:

- 1. Constructed of steel not less than 4 inches (102 mm) in diameter and concrete filled.
- 2. Spaced not more than 4 feet (1219 mm) between posts on center.
- 3. Set not less than 3 feet (914 mm) deep in a concrete footing of not less than a 15-inch (381 mm) diameter.
- 4. Set with the top of the posts not less than 3 feet (914 mm) above ground.
- 5. Located not less than 3 feet (914 mm) from the protected object.

**312.3 Other barriers.** Physical barriers shall be a minimum of 36 inches (914 mm) in height and shall resist a force of 12,000 pounds (53 375 N) applied 36 inches (914 mm) above the adjacent ground surface.

# CALIFORNIA FIRE CODE-MATRIX ADOPTION TABLE CHAPTER 9 FIRE PROTECTION SYSTEMS

Adopting Agency		B S C	S F M		HCI	D	DS	SA		OSHF	D		C S A	D H S	A G R	ОшО	C A	S L	S L C
Adopt Entire Chapter				1	2	1/A C	AC	SS	1	2	3	4							
Adopt entire California as amer sections listed below)	nded (amended																		
Adopt only those sections that	are listed below						Х												
Article / Section	Codes																		
907.4.2	CA						Х												
907.10.1	CA						Х												
907.10.1.1	CA						Х												
907.10.1.2	IFC						Х												
907.10.1.3	IFC						Х												
Table 907.10.1.3 with Note	CA						Х												
907.10.1.4	CA						Х												
907.10.1.5	CA						Х												
907.10.2	CA						Х												
9078.10.2.1	CA						Х												

## SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

#### 907.4 Manual fire alarm boxes.

**907.4.2 Height.** The height of the manual fire alarm boxes shall be a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm), measured vertically, from the floor level to the [DSA-AC] highest point of the activating handle or lever of the box. [DSA-AC] Manual fire alarm boxes shall also comply with Chapter 11B, Section 1117B.6 item 4 of the California Building Code.

**Exception:** [DSA-AC] In existing buildings there is no requirement to retroactively relocate existing manual fire alarm boxes to a minimum of 42 inches and a maximum of 48 inches from the floor level to the activating handle or lever of the box.

#### 907.10 Alarm notification appliances.

**907.10.1 Visible alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.10.1.1 through *907.10.1.5*.

#### **Exceptions:**

- 1. In other than Group I-2 and I-2.1, visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
- 2. Visible alarm notification appliances shall not be required in *enclosed exit stairways*, *exterior exit stairs*, *and exterior exit ramps*.

**907.10.1.1 Public and common** *use* **areas.** Visible alarm notification appliances shall be provided in public *use* areas and common *use* areas, *including but not limited to:* 

- 1. Sanitary facilities including restrooms, bathrooms and shower rooms
- 2. Corridors
- 3. Music practice rooms
- 4. Band rooms

- 5. Gymnasiums
- 6. Multipurpose rooms
- 7. Occupational shops
- 8. Occupied rooms where ambient noise impairs hearing of the fire alarm
- 9. Lobbies
- 10. Meeting rooms
- 11. Classrooms
- **907.10.1.2** Employee work areas. Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with a minimum of 20 percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing impaired employee(s).
- **907.10.1.3 Groups I-1 and R-1.** Group I-1 and R-1 sleeping units in accordance with Table 907.10.1.3 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

TABLE 907.10.1.3 VISIBLE AND AUDIBLE ALARMS

NUMBER OF SLEEPING UNITS	SLEEPING UNITS WITH VISIBLE AND AUDIBLE ALARMS
6 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

Also see Chapter 11B Section 1111B.4.5, Table 11B-3, and Table 11B-4 of the California Building Code.

- **907.10.1.4 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with *NFPA 72*.
- **907.10.1.5 Group I-1, R-3.1 and R-4.** Protective social care facilities which house persons who are hearing impaired, shall be provided with notification appliances for the hearing impaired installed in accordance with NFPA 72 and which shall activate upon initiation of the fire alarm system or the smoke alarms.
- **907.10.2 Audible alarms.** Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: *75* dBA in occupancies in

Groups R and I-1; 90 dBA in mechanical equipment rooms and 60 dBA in other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 95 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

In group I-2 occupancies, audible appliances placed in patient areas shall be only chimes or similar sounding devices for alerting staff.

**Exception:** Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in *patient* areas of Group I-2 occupancies.

**907.10.2.1 Audible alarm signal.** The audible signal shall be the standard fire alarm evacuation signal, ANSI S3.41 Audible Emergency Evacuation Signal, "three pulse temporal pattern", as described in NFPA 72.

**Exception:** The use of the existing evacuation signaling scheme shall be permitted where approved by the authority having jurisdiction.

#### **CHAPTER 10 MEANS OF EGRESS**

Adopting Agency		B S C	F		НС	D	DS	SA .		OSHF	D		C S A	D H S	A G R	D W R	C E C	C A	S L	S L C
Adopt Entire Chapter		Ť		1	2	1/A	AC	SS	1	2	3	4			<u> </u>		Ť			Ť
						С													<u> </u>	
Adopt entire California as amend sections listed below)	led (amended																			
Adopt only those sections that ar	e listed below						Х													
Article / Section	Codes																			
Accessible Means of Egress	IFC						Х													
Area of Refuge	IFC						Х													
Exit	IFC						Х													
Guard or Guardrail	CA						Х													
Handrail	IFC						Х													
Public Way	IFC						Х													
Stair	IFC						Х													
Stairway	IFC						Х												Ī	
1003.1	IFC						Х													
9 <u>1003.3.4</u>	<u>CA</u>						<u>X</u>													
1003.5 Exc 1, 2 & 3 only	CA						X													
1007.1	CA						X													
1007.2	CA						Х													
1007.3	CA						Х													
1007.4	CA						X													
1007.5	CA						X													
1007.5.1	IFC						X													
1007.6	CA						X													
1007.6.1	CA						X													-
1007.6.2	CA						X													
1007.6.3	IFC						X													<del>   </del>
1007.6.3.1	HFC CA						X													
1007.6.4	CA						X													-
1007.6.5	CA						X													-
1007.7	CA						X													
1007.8	CA						X												$\vdash$	-
1007.8	GA IFC						X												$\vdash$	
1007.8.2	GA IFC						X												$\vdash$	-
1007.8.3	IFC						X												$\vdash$	-
1007.9	CA																		$\vdash$	-
1007.9 1008-Only							X												$\vdash$	-
1008-01lly 1008.1.1 Exc 2, 7 & 8 only	CA <u>CA</u>						<u>X</u>												╁	-
	<u>CA</u>						X												$\vdash$	-
1008.1.6 Exc only																			$\vdash$	
1008.1.8.1	CA CA		$\vdash$		1		<u>X</u> X													-
1008.1.8.6 No. 5.1 Only		-	$\vdash$				X			1					-					-
1009-Only 1009.3 Exc 5 only	CA	-	$\vdash$				Х						Н						<del></del>	
	<u>CA</u>	-	$\vdash$				<u>X</u> <u>X</u>			1									$\vdash$	
1009.10 last paragraph only	<u>CA</u>	-	$\vdash$				X						$\vdash$						-	
1010-Only	CA				<b>.</b>		X												$\vdash$	
1010.1 Exc 1 & 2 only	<u>CA</u>		$\vdash \vdash$		<b>.</b>		<u>X</u> <u>X</u>								<u> </u>		<u> </u>		<del></del>	<del>                                     </del>
1010.6.5	<u>CA</u>		$\vdash \vdash$		<b>.</b>		X								<u> </u>		<u> </u>		<del></del>	<del>                                     </del>
1010.9 Exc 1 only	<u>CA</u>						X								ļ				<u> </u>	
1011.3	CA		Ш		<u> </u>		Х												<u> </u>	
1012-Only	CA		Ш		<u> </u>		Х												<u> </u>	
1013.1	CA						Х													
1013.2	IFC						Х													

1013.3	CA			Х							
1014.4 last paragraph-Only	CA			Х							
1014.4.1 Exc only	<u>CA</u>			<u>X</u>							
1020.1.6.2	CA			Х							

#### [B] SECTION 1002 DEFINITIONS

#### 1002.1 Definitions.

**ACCESSIBLE MEANS OF EGRESS.** A continuous and unobstructed way of egress travel from any accessible point in a building or facility to a public way.

**AREA OF REFUGE.** An area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation.

**EXIT.** That portion of a means of egress system which is separated from other interior spaces of a building or structure by fire-resistance-rated construction and opening protectives as required to provide a protected path of egress travel between the exit access and the exit discharge. Exits include exterior exit doors at ground level, exit enclosures, exit passageways, exterior exit stairs, exterior exit ramps and horizontal exits.

**GUARD** (or **GUARDRAIL**). A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

HANDRAIL. A horizontal or sloping rail intended for grasping by the hand for guidance or support.

**PUBLIC WAY.** A street, alley or other parcel of land open to the outside air leading to a street, that has been deeded, dedicated or otherwise permanently appropriated to the public for public use and which has a clear width and height of not less than 10 feet (3048 mm).

**STAIR.** A change in elevation, consisting of one or more risers.

**STAIRWAY.** One or more flights of stairs, either exterior or interior, with the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one level to another.

## [B] SECTION 1003 GENERAL MEANS OF EGRESS

**1003.1 Applicability.** The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the means of egress system, in addition to those specific requirements for the exit access, the exit and the exit discharge detailed elsewhere in this chapter.

Exception: ...

[DSA-AC] In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, Section 109.1 regulated by the Division of the State Architect—Access Compliance shall also comply with Chapter 11A or Chapter 11B of the California Building Code, as applicable.

**1003.3.4 Clear width.** Protruding objects shall not reduce the minimum clear width of accessible routes as required *in Chapter 11B*, Section 1133B.8.6 of the California Building Code.

#### 1003.5 Elevation change.

#### **Exceptions:**

- A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2 and R-3, and Groups S and U at exterior doors not required to be accessible by Chapters 11A or 11B of the California Building Code.
- 2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapters 11A or 11B of the California Building Code, provided that the risers and treads comply with Section 1009.3, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.
- 3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by *Chapters 11A or 11B* of the *California Building Code*, provided that the risers and treads comply with Section 1025.11 and the aisle is provided with a handrail complying with Section 1025.13.

## [B] SECTION 1007 ACCESSIBLE MEANS OF EGRESS

**1007.1** Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required by Section 1015.1 or 1019.1 from any accessible space, each accessible portion of the space shall be served by accessible means of egress in at least the same number as required by Section 1015.1 or 1019.1. In addition to the requirements of this chapter, means of egress, which provide access to, or egress from, buildings for persons with disabilities, shall also comply with the requirements of Chapters 11A or 11B of the California Building Code, as applicable.

#### Exceptions:

- 1. Accessible means of egress are not required in alterations to existing buildings.
- 2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5 and Chapters 11A or 11B of the California Building Code, as applicable.
- 3. In assembly spaces with sloped floors, one accessible means of egress is required from a space where the common path of travel of the accessible route for access to the wheelchair spaces meets the requirements in Section 1025.8 and Chapters 11A or 11B of the California Building Code, as applicable.

**1007.2 Continuity and components.** Each required accessible means of egress shall be continuous to a public way and shall consist of one or more of the following components:

- Accessible routes complying with Chapter 11A, Sections 1110A and 1120A or Chapter 11B, Section 1114B.1.2, of the California Building Code, as applicable
- 2. Stairways within vertical exit enclosures complying with Sections 1007.3, 1020 and Chapter 11A, Section 1123A or Chapter 11B, Section 1133B.4, of the California Building Code, as applicable.
- 3. Exterior exit stairways complying with Sections 1007.3, 1023 and Chapter 11A, Section 1115A or Chapter 11B, Section 1133B.4, of the California Building Code, as applicable.
- 4. Elevators complying with Section 1007.4 and Chapter 11A, Section 1124A or Chapter 11B, Section 1116B.1, of the California Building Code, as applicable.
- Platform lifts complying with Section 1007.5 and Chapter 11A, Section 1124A or Chapter 11B, Section 1116B.2 and 1116B.3, of the California Building Code, as applicable.
- 6. Horizontal exits complying with Section 1021.
- 7. Ramps complying with Section 1010 and Chapter 11A, Section 1114A and 1122A or Chapter 11B, Section 1133B.5, of the California Building Code, as applicable.

8. Areas of refuge complying with Section 1007.6.

#### **Exceptions:**

- Where the exit discharge is not accessible, an exterior area for assisted rescue must be provided in accordance with Section 1007.8.
- 2. Where the exit stairway is open to the exterior, the accessible means of egress shall include either an area of refuge in accordance with Section 1007.6 or an exterior area for assisted rescue in accordance with Section 1007.8.

**1007.2.1 Elevators required.** In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, at least one required accessible means of egress shall be an elevator complying with Section 1007.4.

#### **Exceptions:**

- In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a horizontal exit and located at or above the level of exit discharge.
- 2. In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a ramp conforming to the provisions of Section 1010.

**1007.3 Exit stairways.** In order to be considered part of an accessible means of egress, an exit stairway shall have a clear width of 48 inches (1219 mm) minimum between handrails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit. *In addition, exit stairways shall comply with Chapter 11A, Sections 1115A and 1123A or Chapter 11B, Section 1133B.4, of the California Building Code, as applicable.* 

#### Exceptions:

- Unenclosed exit stairways as permitted by Section 1020.1 are permitted to be considered part of an accessible means of egress.
- 2. The area of refuge is not required at unenclosed exit stairways as permitted by Section 1020.1 in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
- 3. The clear width of 48 inches (1219 mm) between handrails is not required at exit stairways in buildings or facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 4. The clear width of 48 inches (1219 mm) between handrails is not required for exit stairways accessed from a horizontal exit.
- 5. Areas of refuge are not required at exit stairways serving open parking garages.

**1007.4 Elevators.** In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of Section 2.27 of ASME A17.1. Standby power shall be provided in accordance with Sections 2702 and 3003 of the *California Building Code*. The elevator shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

Exception: Elevators are not required to be accessed from an area of refuge or horizontal exit in open parking garages.

**1007.5 Platform lifts.** Platform (wheelchair) lifts shall not serve as part of an accessible means of egress, except where allowed as part of a required accessible route in *Chapter 11A, Section 1121A or Chapter 11B, Sections 1116B.2.1 through 1116B.2.4*, of the *California Building Code, as applicable*. Standby power shall be provided in accordance with Section 2702.2.6 for platform lifts permitted to serve as part of a means of egress.

**[DSA-AC]** See Chapter 11B, Section 1116B.3 of the California Building Code for additional accessible means of egress requirements at platform or special access lifts.

**1007.5.1 Openness.** Platform lifts on an accessible means of egress shall not be installed in a fully enclosed or fire rated shaft.

**1007.6** Areas of refuge. Every required area of refuge shall be accessible from the space it serves by an accessible means of egress. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1. Every required area of refuge shall have direct access to an enclosed stairway complying with Sections 1007.3 and 1020.1 or an elevator complying with Section 1007.4. Where an elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1020.1.7 for smokeproof enclosures except where the elevators are in an area of refuge formed by a horizontal exit or smoke barrier.

[DSA-AC] Areas of refuge shall comply with the requirements of this code and shall adjoin an accessible route of travel complying Chapter 11B, Section 1114B.1.2 of the California Building Code.

**1007.6.1 Size.** Each area of refuge shall be sized to accommodate *two* wheelchair spaces *that are not less than* 30 inches by 48 inches (762 mm by 1219 mm) *each. The total number of such 30-inch by 48-inch (762 mm by 1219 mm)* spaces per story shall be not less than one for every 200 persons of calculated occupant load served by the area of refuge. Such wheelchair spaces shall not reduce the required means of egress width. Access to any of the required wheelchair spaces in an area of refuge shall not be obstructed by more than one adjoining wheelchair space.

**Exception:** The enforcing agency may reduce the size of each required area of refuge to accommodate one wheelchair space that is not less than 30 inches by 48 inches on floors where the occupant load is less than 200.

**1007.6.2 Separation.** Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 of the *California Building Code* or a horizontal exit complying with Section 1021. Each area of refuge shall be designed to minimize the intrusion of smoke.

**Exception:** Areas of refuge located within a vertical exit enclosure.

**1007.6.3 Two-way communication.** Areas of refuge shall be provided with a two-way communication system between the area of refuge and a central control point. If the central control point is not constantly attended, the area of refuge shall also have controlled access to a public telephone system. Location of the central control point shall be approved by the fire department. The two-way communication system shall include both audible and visible signals.

1007.6.3.1 [DSA-AC] A button complying with Chapter 11B, Section 1117B.6 of the California Building Code in the area of refuge shall activate both a light in the area of refuge indicating that rescue has been requested and a light at the central control point indicating that rescue is being requested. A button at the central control point shall activate both a light at the central control point and a light in the area of refuge indicating that the request has been received

**1007.6.4 Instructions.** In areas of refuge that have a two-way emergency communications system, instructions on the use of the area under emergency conditions shall be posted adjoining the communications system. The instructions shall include all of the following and shall comply with 1117B.5.1 Item 2, of the California Building Code:

- 1. Directions to find other means of egress.
- 2. Persons able to use the exit stairway do so as soon as possible, unless they are assisting others.
- 3. Information on planned availability of assistance in the use of stairs or supervised operation of elevators and how to summon such assistance.
- 4. Directions for use of the emergency communications system.

**1007.6.5 Identification.** Each door providing access to an area of refuge from an adjacent floor area shall be identified by a sign complying with *Section 1117B.5.1 Item 2 of the California Building Code*, stating: AREA OF REFUGE, and including the International Symbol of Accessibility. Where exit sign illumination is required by

Section 1011.2, the area of refuge sign shall be illuminated. Additionally, tactile signage complying with Section 1117B.5.1 Item 1 of the California Building Code shall be located at each door to an area of refuge.

**1007.7 Signage.** At exits and elevators serving a required accessible space but not providing an approved accessible means of egress, signage shall be installed indicating the location of accessible means of egress. Signs shall comply with Chapter 11A or Chapter 11B, Section 1117B.5.1 Items 2 and 3, of the California Building Code, as applicable.

**1007.8 Exterior area for assisted rescue.** The exterior area for assisted rescue must be open to the outside air and meet the requirements of Section 1007.6.1. Separation walls shall comply with the requirements of Section 704 of the *California Building Code* for exterior walls. Where walls or openings are between the area for assisted rescue and the interior of the building, the building exterior walls within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall have a fire-resistance rating of not less than 1 hour. Openings within such exterior walls shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour. This construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower.

- **1007.8.1 Openness.** The exterior area for assisted rescue shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.
- **1007.8.2 Exterior exit stairway.** Exterior exit stairways that are part of the means of egress for the exterior area for assisted rescue shall provide a clear width of 48 inches (1219 mm) between handrails.
- **1007.8.3 Identification.** Exterior areas for assisted rescue shall have identification as required for area of refuge that complies with Section 1007.6.5.

**1007.9** Alarms/emergency warning systems/accessibility. If emergency warning systems are required, they shall activate a means of warning the hearing impaired. Emergency warning systems as part of the fire-alarm system shall be designed and installed in accordance with NFPA 72, as amended in Chapter 45, and Chapter 9, Sections 907.10.1 and 907.10.2.

#### [B] SECTION 1008 DOORS, GATES AND TURNSTILES

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, Section 109.1 regulated by the Division of the State Architect — Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.2 of the California Building Code, as applicable.

#### 1008.1 Doors.

#### 1008.1.1 Size of doors.

#### **Exceptions:**

5.

2. Other than those required to be accessible by Chapter 11B of the California Building Code, door openings to resident sleeping units in Group I-3 occupancies shall have a clear width of not less than 38 inches (711 mm)

openings to resident sleeping units in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).

3.

- 7. In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be adaptable or accessible as specified in Chapters 11A or 11B of the California Building Code, as applicable.
- Door openings required to be accessible within dwelling units shall have a minimum clear width as specified in Chapters 11A or 11B of the California Building Code, as applicable.

#### 1008.1.6 Thresholds.

**Exception:** The threshold height shall be limited to 7.75 inches (197 mm) where the occupancy is Group R-2 or R-3; the door is an exterior door that is not a component of the required means of egress; the door, other than an exterior storm or screen door does not swing over the landing or step; and the doorway is not on an accessible route as required by *Chapter 11A or 11B* of the *California Building Code* and is not part of an *adaptable or accessible dwelling unit.* 

#### 1008.1.8 Door operations.

**1008.1.8.1 Hardware.** Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by *Chapter 11A*, *Section 1126A.6 or Chapter 11B*, *Section 1133B.2.5 of the California Building Code* shall not require tight grasping, tight pinching or twisting of the wrist to operate.

#### 1008.1.8.6 Delayed egress locks.

- 1.
- 2.
- 3.
- 4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only. The time delay established for each egress-control device shall not be field adjustable. For applications listed in Section 109.1 regulated by the Division of the State Architect Access Compliance, see Chapter 11B, Section 1133B.2.5 of the California Building Code.

**Exception:** In facilities housing Alzheimer's or dementia clients, a delay of not more than 30 seconds is permitted.

- 5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: "KEEP PUSHING. THIS DOOR WILL OPEN IN 15 [30] SECONDS. ALARM WILL SOUND." Sign lettering shall be at least 1 inch (25 mm) in height and shall have a stroke of not less than 1/8 inch (3.2 mm).
  - 5.1. A tactile sign shall also be provided in Braille and raised characters, which complies with Section 1117B.5.1 Item 1 of the California Building Code.
- 6.
- 7.
- 8.
- 9.

#### [B] SECTION 1009 STAIRWAYS

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, Section 109.1 regulated by the Division of the State Architect — Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.4 of the California Building Code, as applicable.

#### 1009.3 Stair treads and risers.

#### **Exceptions:**

2.

3.

4.

See the Section 1027.10 for the replacement of existing stairways. For applications listed in Section 109.1 regulated by the Division of the State Architect - Access Compliance, see Chapter 11B, Section 1134B of the California Building

#### 1009.10 Handrails.

#### **Exceptions:**

[DSA-AC] For applications listed in Section 109.1 regulated by the Division of the State Architect — Access Compliance, see Chapter 11B, Section 1133B.4.1of the California Building Code.

## **[B] SECTION 1010**

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, Section 109.1 regulated by the Division of the State Architect — Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.5 of the California Building Code, as applicable.

#### 1010.1 Scope.

#### Exceptions:

- Other than ramps that are part of the accessible routes providing access in accordance with Chapter 11A or Chapter 11B, of the California Building Code ramped aisles within assembly rooms or spaces shall conform with the provisions in Section 1025.11.
- Curb ramps shall comply with Chapter 11A or 11B, Section 1127B.5, of the California Building Code, as applicable.

1010.6.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required for accessibility are permitted to overlap the required landing area as specified in Chapter 11A or Chapter 11B, 1133B.5 of the California Building Code.

#### 1010.9 Edge protection.

#### **Exceptions:**

- Edge protection is not required on ramps not required to have handrails, provided they have flared sides that comply with the Chapter 11A or Chapter 11B, Section 1127B.5 of the California Building Code curb ramp provisions.

3.

#### [B] **SECTION 1011 EXIT SIGNS**

1011.3 Tactile exit signs. For the purposes of Section 1011.3, the term "tactile exit signs" shall mean those required signs that comply with Section 1117B.5.1 Item 1 of the California Building Code.

Tactile exit signs shall be required at the following locations:

1. Each grade-level exterior exit door shall be identified by a tactile exit sign with the word, EXIT.

- 2. Each exit door that leads directly to a grade-level exterior exit by means of a stairway or ramp shall be identified by a tactile exit sign with the following words as appropriate:
  - A. "EXIT STAIR DOWN"
  - B. "EXIT RAMP DOWN"
  - C. "EXIT STAIR UP"
  - D. "EXIT RAMP UP"
- 3. Each exit door that leads directly to a grade-level exterior exit by means of an exit enclosure that does not utilize a stair or ramp, or by means of an exit passageway shall be identified by a tactile exit sign with the words. "EXIT ROUTE."
- 4. Each exit access door from an interior room or area that is required to have a visual exit sign, shall be identified by a tactile exit sign with the words, "EXIT ROUTE."
- 5. Each exit door through a horizontal exit shall be identified by a tactile exit sign with the words, "TO EXIT."

#### [B] SECTION 1012 HANDRAILS

**[DSA-AC]** In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, Section 109.1 regulated by the Division of the State Architect — Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.4.1 of the California Building Code, as applicable.

#### [B] SECTION 1013 GUARDS

**1013.1** Where required. Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7 of the *California Building Code*. Where glass is used to provide a guard or as a portion of the guard system, the guard shall also comply with Section 2407 of the *California Building Code*. Guards shall also be located along glazed sides of stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below where the glazing provided does not meet the strength and attachment requirements in Section 1607.7 of the *California Building Code*.

Exception: Guards are not required for the following locations:

- 1. On the loading side of loading docks or piers.
- 2. On the audience side of stages and raised platforms, including steps leading up to the stage and raised platforms.
- 3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
- 4. At vertical openings in the performance area of stages and platforms.
- 5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
- Along vehicle service pits not accessible to the public.
- 7. In assembly seating where guards in accordance with Section 1025.14 are permitted and provided.

**1013.2 Height.** Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.

#### Exceptions:

- 1. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, guards whose top rail also serves as a handrail shall have a height not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from the leading edge of the stair tread nosing.
- 2. The height in assembly seating areas shall be in accordance with Section 1025.14.

**1013.3 Opening limitations.** Open guards shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening.

#### **Exceptions:**

- 1. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of 6 inches (152 mm) in diameter cannot pass through the opening.
- At elevated walking surfaces for access to and use of electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
- 3. In areas that are not open to the public within occupancies in Group I-3, F, H or S, balusters, horizontal intermediate rails or other construction shall not permit a sphere with a diameter of 21 inches (533 mm) to pass through any opening.
- 4. In assembly seating areas, guards at the end of aisles where they terminate at a fascia of boxes, balconies and galleries shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.
- 5. Within individual dwelling units and sleeping units in Group R-2 and R-3 occupancies, openings for required guards on the sides of stair treads shall not allow a sphere of 4.375 inches (111 mm) to pass through.

#### [B] SECTION 1014 EXIT ACCESS

#### 1014.4 Aisles.

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, Section 109.1 regulated by the Division of the State Architect — Access Compliance shall also comply with Chapter 11A or Chapter 11B, Section 1133B.6 of the California Building Code, as applicable.

#### 1014.4.1 Aisles in Groups B and M.

Exception: Nonpublic aisles serving less than 50 people and not required to be accessible by Chapter 11B (see Sections 1103B.1 Exception 2 and 1123B.2 Exception) of the California Building Code need not exceed 28 inches (711 mm) in width.

#### [B] SECTION 1020 VERTICAL EXIT ENCLOSURES

#### 1020.1 Enclosures required.

#### 1020.1.6 Stairway floor number signs.

**[B] 1020.1.6.2 Tactile floor designation signs in stairways.** When accessibility is required, tactile floor designation signs that comply with 1117B.5.1 Item 1 of the California Building Code shall be located at the landing of each floor level, placed adjacent to the door on the latch side, in all enclosed stairways in buildings two or more stories in height to identify the floor level. At the exit discharge level, the sign shall include a raised five pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.

# CHAPTER 22 MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

Adopting Agency		B S C	S F M		НС	D	DS	SA		OSHF	D		C S A	D H S	A G R	D W R	C A	S L	S L C
Adopt Entire Chapter				1	2	1/A C	AC	SS	1	2	3	4							
Adopt entire California as amende sections listed below)	d (amended																		
Adopt only those sections that are	listed below						Х												
Article / Section	Codes																		
2206.7.3	IFC						Х												

# SECTION 2206 FLAMMABLE AND COMBUSTIBLE LIQUID MOTOR FUEL-DISPENSING FACILITIES

2206.7 Fuel-dispensing systems for flammable or combustible liquids.

**2206.7.3 Mounting of dispensers.** Dispensing devices except those installed on top of a protected aboveground tank that qualifies as vehicle-impact resistant, shall be protected against physical damage by mounting on a concrete island 6 inches (152 mm) or more in height, or shall be protected in accordance with Section 312. Dispensing devices shall be installed and securely fastened to their mounting surface in accordance with the dispenser manufacturer's instructions. Dispensing devices installed indoors shall be located in an approved position where they cannot be struck by an out-of-control vehicle descending a ramp or other slope.

#### HISTORY NOTE APPENDIX

# California Fire Code California Code of Regulations, Title 24, Part 9

For prior history, see the History Note Appendix to the California Fire Code 2001 Triennial Edition Published in April 2002 — December 2005, and effective November 1, 2002.

- SFM 04/06 Adoption of the 2006 edition of the International Fire Code published by the International Code Council, for incorporation into the California Fire Code, CCR, Title 24, Part 9 with amendments for the State Fire Marshal regulated occupancies.
  - This item approved by the Building Standards Commission on January 30, 2007, and effective on January 1, 2008.
- 2. DSA-AC 07/06 Adoption of the 2006 edition of the *International Fire Code* published by the International Code Council, for incorporation into the *California Fire Code*, CCR, Title 24, Part 9 with amendments for the Division of the State Architect—Access Compliance regulated occupancies.

This item approved by the Building Standards Commission on January 30, 2007, and effective on January 1, 2008.

For Errata and Supplements refer to California Building Standards Commission at www.bsc.ca.gov

### 2007 California Referenced Standards Code Title 24 (T-24), Part 12 (Pt), California Code of Regulations (CCR)

# Chapters 12-11A and 12-11B BUILDING AND FACILITY ACCESS SPECIFICATIONS

Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Service's, Division of the State Architect, Access Compliance for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

#### **DETECTABLE WARNINGS**

**Sections 12-11A.201 and 12-11B.201.** "Nominal" means that premanufactured detectable warnings or devices used to create the detectable warning in place shall comply with required dimensions within  $\pm$  0.020-inch for dome height, top diameter and bottom diameter and 0.050-inch for dome spacing.

# PRODUCT APPROVAL FOR DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES

#### **SCOPE**

Sections 12-11A.202 and 12-11B.202. These requirements and test methods apply to detectable warning products and directional surfaces.

#### **DETECTABLE WARNING PRODUCTS**

Sections 12-11A.203 and 12-11B.203. Must comply with the California Code of Regulations, Title 24.

#### **DIRECTIONAL SURFACES**

Sections 12-11A.204 and 12-11B.204. Must comply with the California Code of Regulations, Title 24.

#### **INDEPENDENT ENTITY**

**Sections 12-11A.205 and 12-11B.205.** Evaluation by an independent entity to confirm the prescriptive and performance standard of detectable warning products or direction surfaces installed after January 1, 2001. An independent entity is a not-for-profit product safety testing and certification organization, dedicated to testing for public safety. An independent entity would operate for the testing, certification and quality assessment of products, systems and services.

#### **TWO-YEAR APPROVAL**

**Sections 12-11A.206 and 12-11B.206.** Detectable warning products and directional surfaces are to be recertified every two years without exception or waiver.

#### **FEE**

**Sections 12-11A.207 and 12-11B.207.** The Division of the State Architect Access Compliance may impose a fee on manufacturer's of the specified products, to cover the cost of detectable warning products and directional surfaces.

#### **DISABILITY ACCESS ACCOUNT**

**Sections 12-11A.208 and 12-11B.208.** The fees received from manufacturers will be placed in the Disability Access Account.

#### DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES

**Sections 12-11A.209 and 12-11B.209.** Detectable Warning Products and Directional Surfaces must ensure consistency and uniformity:

- a) Shape,
- b) Color fastness,
- c) Conformation,
- d) Sound-on-cane acoustic quality,
- e) Resilience, and
- f) Attachment will not degrade significantly for at least five years.

#### SIGNIFICANT DEGRADATION

**Sections 12-11A.210 and 12-11B.210.** Significant degradation means that the product maintains at least 90 percent of its approved design characteristics.

#### **SELECTION OF INDEPENDENT ENTITY**

**Sections12-11A.211 and 12-11B.211.** The independent entity selected by the Division of the State Architect Access Compliance shall be recognized as having appropriate expertise in determining whether products comply with the California Code of Regulations, Title 24.

**Authority:** Government Code Sections 4450, 4460 and Health & Safety Code Section 18949.1. **Reference:** Government Code Section 4460.

#### **HISTORY NOTE APPENDIX**

### California Reference Standards Code California Code of Regulations, Title 24, Part 12

For all previous History Notes, see the 2001 Edition, Title 24, Part 12.

 (DSA/AC 08/06) Part 12, Chapters 12-11A and 12-11B. Approved by the California Building Standards Commission on January 30, 2007, and filed with the Secretary of State on February 15, 2007. Effective January 1, 2008.

For Errata and Supplements refer to California Building Standards Commission at <a href="www.bsc.ca.gov">www.bsc.ca.gov</a>